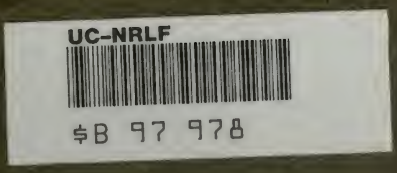
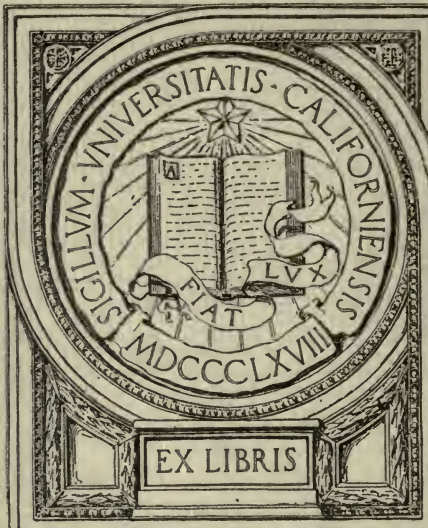
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HISTORICAL SKETCH OF GOVERNMENT OWNERSHIP OF RAILROADS IN FOREIGN COUNTRIES

By W. M. ACKWORTH



Historical Sketch of Government Ownership of Railroads in Foreign Countries

By W. M. ACWORTH

Presented to the

Joint Committee of Congress on Interstate Commerce

SENATOR NEWLANDS (Nevada) *Chairman*

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HISTORICAL SKETCH OF

GOVERNMENT OWNERSHIP OF RAILROADS

IN FOREIGN COUNTRIES

Introductory

On the 24th of May, 1830, the first few miles of the Baltimore & Ohio Railroad were opened for traffic. Four months later, on Sept. 15, came the opening of the whole thirty miles of the Liverpool and Manchester. A yet more conspicuously dramatic event, for not only did this line connect two of the greatest cities in the world, but a Cabinet Minister was killed by one of the first trains run. And so, at the outset, the United States and England, the two countries where capital was most abundant and most venturesome, accepted, half unconsciously no doubt, the principle to which they have since adhered; and, relying on that spirit of individual enterprise which centuries of history had called forth and fostered, entrusted the development of their railways to the unaided energy of private citizens organized into voluntary corporations.

"The English and American maxim is," says Mr. A. T. Hadley, President of Yale, in his well-known book, "Railroad Transportation, its History and its Laws," "that whatever can be done *without* Government, should be thus done. The Continental principle is that whatever can be done by Government, should be." How far operating a railroad was a thing that could be done by Government, must have been a difficult question to solve in the early days. For though construction and maintenance of roads and canals had long been recognized as a Government function, no Government had ever monopolized the carriage of traffic on these highways; and at a very early stage in railway history it became clear that the owner of the road must in this case have also the exclusive right of carriage along it.

But abstract considerations are apt to go to the wall when practical questions press for instant solution. On October 4, 1830, Bel-

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gium, which had in 1815 been made by the Treaty of Vienna part of the kingdom of Holland, declared its independence. And if independence, economic as well as political, was to be secured, if Belgium was to hold its own against Holland, if Antwerp was to be able to compete with Rotterdam, it was urgent that the great traffic route from the Rhine and the German frontier through Liege and Brussels to the Scheldt and the North Sea should be under Belgian control. A railway must be built. If built by private capital, the capital would almost certainly be Dutch. Accordingly, as early as 1834, the Belgian Parliament resolved that the railway should be built and worked by the Government. And by 1840 upwards of 200 miles, the main trunk lines of the Belgian State system as it exists today, were already in operation. And so today we have behind us three-quarters of a century of history during which the characteristics good and bad of State and private railways can be compared and contrasted.

Comparative Statistics

"Most countries own their own railways." This statement, true but misleading, is often made. Bulgaria owns its railways, 1,204 miles in all. The United States has more than 200 times the Bulgarian mileage, all owned by private corporations. Bulgaria counts as a country; the United States counts as one also. According to the latest figures in the *Archiv für Eisenbahnwesen,* the official organ of the Prussian State Railway Administration, there were in Europe at the end of 1913 216,396 miles, of which 116,111 (rather more than half) were State railways. There were in the whole world nearly 700,000 miles of railway of which less than one-third were State railways.*

The capital invested in railways, according to the same authority, amounted to 208 billions of marks, or $49,547,680,000. It is not possible to work out the respective proportions of State and private capital. Suffice it to say that, whereas 33 of the Nations enumerated own their railways in whole or in part, the United States and Great Britain, where the railways are all in private hands, account between them for more than half of the world's total railway capital. The *Archiv* gives no figures of traffic, of work, that is, done for the public. But Mr. Slason Thompson in his Railway Statistics for U. S. A. for the year 1915 (p. 41), states that the twenty-five principal countries of the world have 187,530 locomo-

*The exact figures are 690,138 and 225,914 miles respectively.

tives, of which 89,668 (almost half) are in the United States and the United Kingdom, while out of 5,816,441 freight cars these two countries have 3,123,660* (a good deal more than half). On the whole, having regard to the enormously greater capacity of an engine or a freight car in the United States than elsewhere, it is probably safe to make the broad statement that *two-thirds of the railway mileage of the world has been built; two-thirds of the railway capital of the world has been provided; and two-thirds of the current railway work of the world is done by private enterprise; and only the remaining third by National undertakings.*

It has, however, already been pointed out that, if the nations of the world were polled great and small, and assigning to each nation one vote, as at the Hague Convention, a considerable majority would be found to have decided in favor of entire or partial State ownership. The United States and the United Kingdom are the only nations of the first rank who own no railways. Spain, Turkey, and Greece, among the less important European countries, are in the same position. Every other European nation and most of the extra European countries own some at least of their railways, though several of them, and those not the least important, British India, for instance, and Holland have handed over the working of the national railways, partly in the case of India, wholly in the case of Holland, to private companies. Mexico is set down in the *Archiv* as owning its railways. But in fact the Mexican Government is not the owner but only the majority shareholder, a shareholder who, as long as Mexico was an organized community, was content to vote the election of a board of directors put forward by the private minority holders of the railway stock.

Changes of Ownership and the Causes

Another point should be noted. There is no country which has throughout its history kept its whole railway system in its own hands. In Belgium in 1860 the State lines were less than half of the whole mileage. In 1870 the State proportion had fallen to little more than one-quarter. Prussia at the same date was still a country of mixed ownership, as the Scandinavian countries are still. But after the war with France in 1870 Belgium began to buy up the Private Companies; and Bismarck inaugurated a new policy in Germany. He attempted to acquire the private lines for the new German Empire. Foiled in this attempt by the local particularism

*These figures take no account of the freight cars in the United Kingdom, estimated at 500,000 as a minimum, which are in the service of the railways but the property not of the railway companies but of private individuals.

of the separate States, he carried through in Prussia a thoroughgoing policy of nationalization; and his policy was followed by the other German States within their own jurisdiction. Today private ownership in Germany is almost extinct, and the railways in each several State of the Empire are the property of that State. Germany's example was contagious. In recent years the Russian Government has bought out a good many companies. Austria has carried the same process even further. Belgium has acquired all the private lines of serious importance. In 1898 Switzerland nationalized its railways. Italy did the same in 1906; Japan in 1907. Last, but not least, in 1908 the French Government took over the Western Railway, one of the six great systems among which France had been districted since the beginning of its railway history. Even though on the other hand within the same period Brazil and several of the Central American States sold to private companies—mainly as an available asset to satisfy clamorous creditors—railways which they had owned, it is evident that the idea of nationalization has been in the ascendant in recent years. How far does history help us to explain the fact?

President Hadley wrote in 1886:

> "The motives which have led governments to extend the sphere of their business activity have been three:
>
> 1. To increase their own political influence.
> 2. To make up for the lack of private enterprise.
> 3. To avoid the abuses incident to private management."

Thirty years have elapsed since this was written, and in the light of subsequent experience, perhaps the case may now be stated as follows:

Governments go into the railway business for three reasons.

1. For political reasons. These reasons may be either external or internal. External reasons are to obtain control of an instrument of war that can be used either for aggression or for defence, or to prevent the control of this instrument by capitalist subjects of another possibly hostile power; or again to be able to use the railway tariffs as an auxiliary in support of the policy embodied in the customs tariffs of the country. The main internal reasons are either to unify the nation or to centralize authority or to obtain new sources of revenue independent of the taxes voted by Parliament.
2. To make up for the lack of private enterprise.
3. With the idea of procuring for their citizens better condi-

tions (lower rates, greater facilities, more impartial treatment, etc.) than private enterprise has given or is expected to give.

It would require a volume to tell in full the events which led up to nationalization even in any one country, to enumerate the various reasons, and to estimate the comparative value to be assigned to each. But the outline of the story can be briefly told.

Nationalization in Prussia

Prussia, the leading instance of State ownership, as being at once the largest and usually regarded as the best example of an efficient National railway system, must be dealt with first. At a later stage in this paper we shall have to consider two questions of first-rate importance.

1. Are the Prussian railways really efficient when judged by the standard of comparable private undertakings; and
2. Assuming for the sake of argument that the Prussian railways are efficient, is their efficiency under an autocratic Government any ground for expecting that National railways would be equally efficient under the democratic form of government that exists in the United States and the United Kingdom?

For the moment we are only concerned with the history of the nationalization policy inaugurated by Bismarck.

When railways first came into existence, Germany was only a "geographical expression." Each State—there were some two score of them—was practically an independent sovereignty. At the outset several of the most important States of the second rank, Bavaria, Wirtemberg, Baden and Saxony, followed the example of Belgium. The Grand Duchy of Mecklenburg offers a curious example of vacillation. At first its railways were in private hands; then they became the personal property of the Grand Duke; then in 1878, just at the time when Prussia was nationalizing its railways, they passed back into private hands; and finally, in 1890 they were acquired by the State. Speaking broadly, one may say that in the richer and more commercially developed parts of Germany the railways were in private ownership; in the more backward agricultural districts they were in the hands of the various State Governments. This is well exemplified by the history of the kingdom of Prussia.*

*The King of Prussia is, under the constitution of 1870, also German Emperor. But Prussia still remains a separate State. It is much as though the Governor of the State of New York was always also President of the United States. But New York is, in population, less than one-tenth of the United States. Prussia is three-fifths of Germany.

At an early date private railways were constructed in Westphalia, along the Rhine, and connecting the Rhine and Hamburg with Berlin. But private enterprise hesitated to build railways over the poor country from Berlin eastwards, and the State had to undertake the task. So that almost from the beginning Prussia had experience of State railways. Then, after the war with Austria in 1866, Prussia annexed Hanover, Hesse-Cassel and other smaller States, and so entered into possession of a considerable additional mileage of State railways.

Then came the war with France in 1870, resulting in the unification of Germany under the leadership of Prussia. And Bismarck, in order to cement together the newly formed Empire, attempted to acquire all the railways of Germany for the Empire as one single unit. But the feeling for State rights, especially in the South, was too strong even for Bismarck. The kingdoms of Bavaria and Saxony replied to the Prussian proposal by promptly taking into their own hands such private lines as existed in their territories. Foiled in this attempt, Bismarck determined at least to nationalize all the Prussian railways. Probably he had a stronger case for his action than has ever existed at any time in any other country. The private systems were comparatively small and of very different financial strength. The shape of Germany, the fact that traffic passed in all directions over its frontiers, the fact that it possessed no dominating central city such as Paris or Vienna or London—all these causes had resulted in a condition of what might be called railway anarchy. There was no uniformity of tariffs, scarcely even of operating regulations and conditions. While traffic from abroad was attracted to round-about routes by reduced rates, often accompanied, it was alleged by secret rebates, the local rates were high, and the exchange of traffic between two neighboring systems was actually discouraged.

In the Session of 1879 the Ministry submitted to the Prussian Parliament an elaborate memorandum in support of the policy of nationalizing the railways remaining in private hands.* It marshalled with great skill, and applied to the special case of Prussia, all the familiar arguments in favor of railways nationalization. It began by emphasizing the importance of railways for military purposes—it is interesting to observe that the "military" note is struck hard at the outset—and for the development of trade. It went on to declare that various abuses were inseparable from private management. These abuses it described as (1) the existence of numer-

*Begründing des Gesetzentwurfes betreffend den Erwerb mehrerer Privateisenbahnen für den Staat. Abgeordneten Hauses Verhandlungen Session 1878-1880, Acktenstück, No. 5.

ous concerns of doubtful solvency and restricted capacity of service, (2) abuse by the concessionaires of their privileged position, (3) opposition to desirable reforms, (4) complicated and arbitrary variations in their methods of organization, (5) chaos of tariffs, (6) quarrels and waste resulting from the fierce competition of numerous separate administrations.

Perhaps it is desirable at this stage to bring the allegation that all these abuses are inseparable from private management to the test of nearly forty years of subsequent history and to deal with them seriatim as follows: (1) There are no concerns of doubtful solvency and restricted capacity among the private railway companies of France, and none of more than trifling importance in England. (2) Appears to mean that a company strives to gain an adequate net revenue before it will reduce its rates, which is true. But as the Prussian memorandum lays down in the strongest terms the obligation of a State system to do the same thing, and as the Prussian Government has for many years offered an unyielding opposition to any reduction of rates, while it has extracted from passengers and shippers a net revenue, which, after paying interest in full of the railways' debt, yields in normal times a sum of some fifty million dollars towards the general expenses of Government, the abuse—if it be an abuse—does not seem to be confined to private railways. (3) In answer to this charge it is sufficient to say that it is the private railways of England, France and the United States which have led the world in improvements, while it would be difficult to mention a single reform for which the world is indebted to the State railways of Prussia. (4) As has been said, had this charge been confined to the private railways of Prussia, there was a considerable foundation for it. But it applies neither to France, England nor the United States. In all these countries the private companies have worked out among themselves uniform codes of rules in reference to operation, construction of equipment, interchange of traffic, and everything else required to avoid interruption of through service. (5) As for chaos of tariffs, the French tariffs are simpler and more logical than those of Prussia, and for all ordinary traffic they are uniform throughout the whole of France. Perhaps the most scientific tariff in the world is that which for very many years has ruled in the Trunk Line Territory of the United States with its simple and easily intelligible New York-Chicago basis. (6) As for "quarrels and waste," quarreling is only a bad name for competition. Competition may or may not be a good thing. But it is not inseparable from private ownership. The French companies have, with negligible exceptions, never competed with one

another, while the English have in large measure ceased to do so. Competition would probably have much more largely diminished in the United States also, had not the deliberate policy of Congress been to keep it alive. So far as competition implies waste, that is, the expenditure of money that in the absence of competition would not have been spent, one cannot have omelettes without breaking eggs. Prussia has abolished competition. Her railway accounts give us no reason to think she has thereby abolished waste. But with this point it will be necessary to deal hereafter.

To return to the memorandum. The Prussian ministry go on to say that as early as 1873 a Special Commission had reported that a universal State System should be regarded as the ultimate aim to be sought. They then go on to set down the advantages of a single unified management. These they summarize as follows:

> Avoidance of the construction of competing lines.
>
> A reduction of the numbers of officers and staff and of the amount of correspondence.
>
> Unification of tariffs and train schedules.
>
> Simplification of dealing with damage claims.
>
> Provision of interchange stations.
>
> Better use of equipment.
>
> Avoidance of duplications of service and of round-about routing of traffic resulting in higher operating costs and consequently higher rates.

It is the duty of the State, says the memorandum, to secure to the public rates which shall be low, steady and uniform. It is also important to the State that the railway tariffs should correspond with the fiscal policy of the country and not be allowed to neutralize the customs tariff. Assuming, then, the memorandum goes on to say, that the railways of the country must be in a single hand, this object may be attained in four different ways. (1) A single private company may both own and operate, (2) a private company may operate the lines which the State owns, (3) the State may operate all the private owned companies, (4) or, lastly, the State may both own and operate the whole system. And it is for this last solution that the memorandum declares. Confidence is expressed that the zeal of the staff will suffice to render unnecessary the stimulus of competition. The State, it is said, having no shareholders greedy for their annual dividend, can afford to take longer views than a company. But it must continue to charge rates sufficient to cover expenses, interest and sinking fund and the "current expenses of the State." Whether this meant what it said, or whether it only meant the liabilities of the State in its capacity as railway owner, it is impossible to decide.

This much, however, is certain. The Act as it passed the Prussian Parliament, contrary to what had generally been understood during its progress, contained no express provision that railway revenues should be used only for railway purposes. And ever since, the railways have been, to use the favorite phrase of domestic critics, "the milch cow of the Treasury."

On the whole it is abundantly clear that, though there were considerable abuses of private ownership in Prussia, and though the desire for unification of management both from the commercial and the operating point of view was not without weight, the main reason for Bismarck's action was of a political nature. It is in harmony with all Prussian history that the importance of military considerations and the necessity of making public control paramount in the life of the country should weigh above all other considerations with a Prussian statesman; and after the war with France and the creation of the German Empire these considerations might be expected to have even greater weight than at any other time.

Switzerland

Were it not that the scale is so disproportionate as to make a comparison almost laughable, for the railroads of the United States earn as much money in two days as the Swiss Railway system in a twelvemonth Swiss history would be a stronger argument than most that are put forward for the nationalization of American railroads. Switzerland has owned and operated its railways for more than fifteen years. Switzerland is a democracy. And Switzerland, though the results fell very far short of the expectations entertained at the time of purchase, managed its railways, on the whole, with fair, if by no means with brilliant success, until the breaking out of the European war upset the entire life of the country.

Switzerland is a union of three nationalities, German, French and Italian. But the German population is a good deal more than two-thirds of the whole; and naturally therefore German political and social theories have great influence. As early as 1891, the Swiss legislature passed a law authorizing the purchase of one of the principal railways, the Swiss Central. But this law was defeated on a referendum by a majority of more than two to one. The movement, however, in favor of nationalization continued. In 1897 an Act for the purchase of all railways except lines of purely local interest passed the two Chambers, with majorities of 98 to 29, and 25 to 17 respectively; and this time on a referendum there was a two-to-one majority in favor. The memorandum prefixed to the Bill repeated the arguments in favor of State ownership in words that

might almost have been copied from the Prussian memorandum which has already been dealt with. There was, however, one additional argument which apparently had as much weight as all the others put together. Swiss Railway Shares, it was stated, had of late years ceased to be held as permanent investments, and had passed in large measure into the hands of speculators who were not Swiss citizens but foreigners. And this dangerous state of affairs could not be allowed to continue. It had in fact been found that in three out of five companies the majority of the registered shareholders—and under a law of 1895 "registered" shareholders alone were entitled to vote—were foreigners.

It is not necessary to go into the history of the purchase. Three of the principal roads were transferred to the State in 1901, a fourth in 1903, and the last, the Gotthard, in 1909. The purchase price which was fixed in every case by agreement, exceeded by about 11 per cent. the estimate of the cost originally put forward by the Government. Warned by Prussian history, the Act laid down categorically that the Railway Budget was to be absolutely and completely independent of the ordinary budget of the State. Any surpluses obtained were to be devoted solely to railway purposes, either to be used as capital or to be devoted to reduction of rates and improvement of service.

In the early days of nationalization there was a very serious increase in expenses, due partly to a more generous service, but mainly to increased wages and reduced hours for the staff. For the four years following on 1903 the cost of staff increased year by year as compared with the previous year by the following percentages: 10.16, 7.08, 9.99, 9.27. Between 1900 and 1911 the number of the staff increased 46 per cent., while wages increased 92 per cent. In 1912 a further increase of less than 1 per cent. in number of staff corresponded with an increase of no less than 10.2 per cent. in wages. The increase in the number of the staff was, no doubt, justified by a 25 per cent. increase in road mileage, and an increase of 100 per cent. in passenger traffic and of 67 per cent. in freight traffic. But the rise of over 100 per cent. in the wages bill upset the equilibrium entirely. The operating ratio went up from 65.53 per cent. in 1903 to 71.03 in 1908. In three years, after meeting operating expenses and the charges of the debt, there was an accumulated deficit of over $2,500,000.

The management took fright. They cut down renewals, reduced services, increased rates and fares, stopped automatic increases in staff wages, and by refraining from filling up vacancies gradually reduced the number employed. The public and the employees submitted, not without natural reluctance, and the financial equilibrium

was restored. After placing to sinking fund an average of about a million dollars per annum the railways just cover interest on their debt at the rate of 3½ per cent. But the rosy views of the authors of State purchase have been far from materializing. They promised reductions of rates and fares, and with the great increase in traffic density ought, one cannot but think, to have been able to obtain them. The average fare was indeed reduced by 13½ per cent. between 1900 and 1911. But freight rates were rather worse than stationary. The ton-mile rate was slightly under 3 cents a mile in 1900; in 1911, it was slightly over. The authors of the purchase further estimated that the profits to be realized would suffice to extinguish the railway debt within 60 years. In fact, the sum paid for the acquisition of the railways was $205,493,880. And the debt at the date of the last account, with one-quarter of the period expired, so far from being reduced had risen to $270,132.80.

Italy

The history of Italian railways is much too complicated to be even sketched in outline here. An admirable summary coming down to 1884 will be found in Hadley's "Railroad Transportation". Italy has experimented with every conceivable form of railway policy. It has tried State ownership and operation, private ownership and operation, State ownership with private operation, and now, for the last ten years, it has reverted to both ownership and operation by the State. The country has been hampered in its railway development by various causes; geographically, by its shape and by the mountainous divisions between east and west; politically, by the fact that not until 1870 did the whole of Italy become a united kingdom; and financially, by the fact that the economic development is backward, the people very poor, and, at least till quite lately, subject to a crushing burden of taxation.

As the Kingdom of Italy gradually grew together out of its component States, it was necessary to make railways to cement its unity. Further, the State was compelled to take over the liability for railways which other people had constructed. The Austrians, for example, had built railways in Lombardy and Venetia, but when they were expelled from those provinces, in 1859 and 1866 respectively, the State had to buy out the Austrian company, or else leave two of the richest provinces still subject to the domination of the hated foreigner.

Betwen 1866 and 1885 the bulk of the railways of the country were in the hands of the State. In the latter year, as the result of an inquiry by a Commission which sat from 1878 to 1881, studied

the history of the railway world in exhaustive detail, and embodied its report in seven quarto volumes, the Italian railway system was handed over to two great operating companies on a 60 years' lease, terminable at the end of 20 or 40 years— the Mediterraneo and Adriatico respectively. The essential idea was, as indeed the names of the Companies imply, that one system should operate along the western coast and the other along the eastern. Each company was, either by its own lines or by means of trackage rights, to have access to the great centres,—Milan, Florence, Rome, Naples,—and in this way it was hoped that competition would secure adequate services and reasonable rates.

The leasing system was not a success, mainly because both the lessors and lessees took too sanguine a view of the prospects of the future. Almost at the outset it became evident that additions and improvements, especially additional rolling stock, were urgently needed; and there were no additional net receipts to pay the interest on the capital required. Why should the Government find this money for railways not in their hands; and, on the other hand why should the Companies take the risk on so short a tenure? There was another very serious factor. The railway staff, who had great political influence, and who assert, probably not without reason, that they were overworked and under paid, were clamoring, and in some cases even striking, for better conditions of service. And last but not least, the rolling stock was grossly inadequate, and what there was, was almost falling to pieces. In the result Parliament, with a sudden resolve to cut a knot which it could not untie, on April 22nd, 1905 determined to take over the railways as from the following 1st July.

Undoubtedly as agencies of public service the Italian railways have been considerably improved in the last ten years. The number of locomotives increased in eight years from 3,580 to 5,322, and the number of freight cars from 69,000 to 105,000. And the improvement is even greater than these figures would indicate, for old stock has been scrapped and replaced by new and efficient equipment; lines have been improved and doubled on a considerable scale; and the services undoubtedly much improved. But the financial results are very serious, especially for a country so poor as Italy. The demands of the staff which the railway administration has found itself powerless to resist, have, in the eight years, 1906 to 1913, implied an additional expenditure of $18,330,440. In the same period the number of staff increased from 121,000 to 149,000, equal to 23 per cent. Per kilometre of road worked there were 9.3 men at the earlier dates and 10.9 at the later. But while numbers increased 23

per cent., cost increased 57 per cent.; in other words, the average wage per employee increased 27 per cent.

The gross receipts rose in the eight years from $78,724,416 to $120,595,000, or well over 50 per cent., while the length of line operated remained practically unchanged. Per train-mile the increase was from $1.41 to $1.63 or about 16 per cent. With much greater density of traffic and a considerable increase in earnings per train-mile, one would naturally have expected a substantial improvement in the operating ratio, once road and rolling stock had been brought into good order. But the opposite has been the case. In the first year of nationalization the operating ratio was 73.4; in no subsequent year has it fallen below 79.5 per cent.; and for the three years 1911-13 it averaged 84.4 per cent. Each year shows a substantial advance in operating costs over the year preceding it. The figure in the first year of the period was $57,885,600; in the last it is $102,264,560, an increase of over 78 per cent.

The final result is that, whereas in the financial year 1906-7 the railways paid over to the Treasury $9,796,366 as a return on a capital of $1,091,404,045, which is roughly 1 per cent. in the last year they only returned $5,402,656 on a capital that meanwhile had risen to $1,374,975,952 which is roughly 2-5ths of 1 per cent. An attempt was made in 1909 to raise the rates but the Ministry failed to carry their proposals and went out of office.

How far he Italian Government is satisfied with the existing situation may be judged from a significant fact which has not hitherto received the publicity which it merits. In at least two cases just before the war concessions had been granted to a private enterprise which was to take over a portion of the existing State railway, to build an extension with the help of substantial State subsidies, and then work on its own account both sections as one undertaking.

Australia

The most conspicuous instance of railways being constructed by the State because private enterprise refused to undertake the task is to be found in the Australasian Colonies of Great Britain. The Australasian population is of pure British stock, and when the necessity of railway building became manifest, as true Britishers they naturally expected private enterprise to undertake the task. But local capital was scant and England was far away. Moreover, Australasia was in the throes of the gold fever resulting from the discovery of the rich fields of Ballarat and Bendigo. And such local capital as was available was not likely to be put into railway enterprise to earn a possible 5 per cent. when the gold fields offered

prospects of a fortune in a few months. And accordingly as the need of railroads was imperative, the Governments of the separate colonies borrowed money on their own credit and set to work to construct their own State railway systems. Once embarked on such ownership they have never gone back from it. Certain local lines have, from time to time been built by private capital, but they have never been important. On the one hand neither local nor English capital has been over anxious to go into the business, and on the other, the State railways have been jealous of interference by private companies. Speaking broadly the seven separate States which make up Australasia have among them over 20,000 miles of railway owned and worked by the respective Governments. And it must be frankly said that public opinion is entirely in favor of this system. No proposal to divest the States of their ownership would be listened to for a moment. And, having regard to the well-known fact that State socialism has been carried further in Australia than in any other part of the world, this is not surprising.

Whether the Australian public are really competent to judge how far they have got a good bargain may be illustrated by the following anecdote. Some years ago, a distinguished railway man went from America to assume the post of Chief Commissioner, in other words President, of one of the most important Australian State Systems. After he had been in charge for a year or two, he sent to a railway friend at home statistics showing the improvements and economies effected under his management. The friend, in acknowledging the receipt, pointed out that the figures furnished did not include the ton-miles of traffic, and therefore neither receipts nor cost could be worked out on a ton-mileage basis, and asked whether it was possible that a railway man accustomed to American methods failed to keep statistical records in this form. The answer was in effect as follows: "I have the ton-mileage figures. I dare not publish them. If I did publish them, they would show a ton-mile rate so excessive as compared with other countries similarly situated, where the traffic is mainly in agricultural products carried long distances, that public opinion would enforce a sweeping reduction in rates and bankrupt the undertaking." It may be added, as proving that the Chief Commissioner in question had good reason for desiring to avoid a comparison, that two—New South Wales and South Australia—out of the seven Australasian State Railway systems do publish ton-mileage statistics. They show ton-mile earnings of 2.20 cents and 2.12 cents respectively. The corresponding figure for the private railways of Canada is 0.75 cents, and for the private railways of the United States 0.738 cents.

Russia, Austria and India

Russia, Austria and India may be grouped together as three countries where a mixed system of State and private ownership prevails. They are all alike in the fact that political, and especially military reasons compelled the State to make railways which private enterprise was not prepared to undertake. They are alike too in the fact that the tendency has swayed back and forth as between State and private ownership. Austria at one time sold to private companies a number of railways that had been built by the State. Nowadays having bought most of them back again, it owns 80 per cent. of the total. One incident of the transfer deserves to be related. The Kaiser Ferdinand Nordbahn was an old and very rich company. Its dividend for the previous five years had averaged over 12 per cent. It was taken over in 1906. In 1910 the President of the Austrian Chamber of Deputies described the result as follows: "We have always been in favor of the State taking over the railways, but if we had been able to foresee the results of the management I assure you we would have hesitated a little longer. We are still in favor of the principle, but it does seem to us that our government has performed a remarkable feat when it has succeeded in creating a deficit on the Northern Railway. The government have enlisted an army of new employees; they have gone much too far in the reduction of hours of labor; instead of commercial management they have appointed lawyers to posts that require business men or experts; they have established an entirely unpracticable bureaucracy. At the present moment we are face to face with a deficit of $25,000,000. There would be no deficit at all if the return from our railways were that which it ought to be. I repeat that absolute imbecility has characterized the taking over of our railways. We must introduce business ideas into the government service." Russia, too, has not only built State railways but taken over private railways. Of late years, however, the tendency seems to be in the direction of private enterprise, subsidized and closely controlled by the Government, which at the present time owns and works two-thirds of the whole mileage. In India, several of the most important lines were built by private enterprise with State guarantees of dividend for a short term. At the end of the term, when these railways passed into the hands of the State, they were leased back to the old Companies as operating Contractors. At the moment of writing, an exhaustive investigation is proceeding, which seems likely to result in the adoption of a definite policy for the whole country. British merchants in India are apparently strongly in favor of retaining the private companies. Indian native

opinion, appears, so far as it is vocal, to be in favor of State ownership, the reason being that it is thought that Indian ideas would have more influence on the policy of a Government Department on the spot, than on that of a Board of Directors sitting in London. This last argument raises a point, the importance of which we have already seen in the cases of Belgium and Switzerland. Evidently the argument against private ownership is stronger where the capital is foreign than where it is found within the country itself.

A point of importance should here be noted. It is true that the Austrian Government, forty years ago divested itself of its Railway Property. The Italian Government divested itself of the operation though not of the ownership as lately as 1885. More recently, Brazil —as also other less important States in South America, Guatemala and Nicaragua—have handed over some or all of their railways to private companies. But, speaking broadly, it is safe to say—subject, however, to the possibility of an exception in the case of Belgium to be referred to later—that nowadays, a decision of a nation to acquire its railways is irrevocable. This may be taken as proving—it has often asserted that it does prove—that no nation having experienced the benefit of State ownership ever desires to go back on its decision. But the argument cuts also the other way. If the decision be irrevocable, and modern railway history seems to indicate that it is, it is also well to be quite satisfied that it is the right decision before making it.

Holland

One country, small but not unimportant, has not hitherto been mentioned. In Holland, though some of the most important lines were built by the State, the operation has always been wholly in private hands. For many years, there were in Holland three principal companies; the State Railway Company, the Holland Company and the Dutch Rhenish Company. In 1890, the Dutch Government made a new departure. It bought up all the lines which it did not own, and it then apportioned the whole system anew between two companies representing, respectively, the old State Railway and the Holland Companies, in such a manner that each Company had access to every important town in competition with the other. This system, which presumably was patterned on the Italian System of 1885, has been in existence ever since. In 1908 a motion in Parliament in favor of nationalization was brought forward and defeated. A Parliamentary Commission to investigate the question was subsequently appointed and reported unfavorably. The public seem to be satisfied with things as they are, the passenger service appears to travelers exceedingly good, but the financial result to

the State is not over satisfactory. That, however, is perhaps unavoidable. Holland is intersected everywhere by rivers and canals, which have to be kept open for drainage purposes, and they carry the bulk of the heavy traffic of the country and of the German through traffic. The railways therefore have to depend for a livelihood in the main on passenger and high class freight. What bulk freight they get, they can only get at exceedingly low rates.

One further point may be here noted. A suggestion has, from time to time been put forward in various countries where the system of private ownership prevails, that the Government should purchase one or more of the private undertakings, and should run it, partly as a pattern to be followed, and partly as a regulating force to control the rates charged on the private railways alongside. Some such idea seems to be implied in the recent papers published in the United States by Mr. W. W. Cook. The idea has never been carried into practical effect. It is hardly likely to be seriously taken up nowadays in any country, and under the circumstances, criticism is evidently superfluous.

France

The railway history of France stands by itself. Nowhere is the passion for logic and the love of symmetry which distinguish the French genius better exemplified than in the history of the French Railway system. The ground plan of the policy which, broadly speaking, France has followed ever since, was laid down in a law passed as long ago as 1842. There were important developments after the world crisis in 1857, and again in 1878. And on 1st January, 1909, the Government by taking over one of the six great systems—the Western—upset the symmetry of the original plan. But with this exception, throughout the whole history the original plan has stood firm. The whole country was divided up among six great companies, five of which radiate from Paris, and the sixth, the Midi, serves the extreme South and Southwest. The development of the railway network has been systematic from the outset; trunk lines first, then important branches, then the less important ones, and finally in recent years a considerable development of light secondary lines. Throughout, the State has guided, subsidized and controlled. Each company has a monopoly of its own district. So far as possible, the points where the great systems meet are arranged—not, as in Holland, or formerly in Italy, at the great towns—but precisely at the points of least importance from a traffic standpoint. Where traffic is unavoidably competitive, as for instance from Paris to Central Switzerland, which can be reached either by the Eastern or by the Paris and Lyons railway, arrangements are deliberately made

to prevent competition. The Government controls all rates and fares charged and all services given, and the Government approves, not merely of pools, but of agreements by which shippers, attempting to consign traffic by the route by which the railway companies have agreed the traffic shall not flow, are deliberately penalized by higher rates. At a later stage of this paper, more must be said of the work which the French Railways have done, and reasons will be given to show that the French private companies have served their public at least as well as the Prussian State railways have served theirs. But it belongs here to deal with the history and the results of the nationalization of the Western Railway eight years ago.

For more than thirty years the French Government have owned and worked a system of lines in the Central West of France. This system was not inconsiderable in mileage (1844 miles), but its district was purely agricultural and its traffic scant. It only reached Paris over the lines of the private companies, and even when it served important towns such as Nantes and Bordeaux, it only served them by inferior routes. The financial results were very unsatisfactory—the operating ratio over a series of years ranged between 72 and 83 per cent—but in some respects, as, for instance, admitting third class passengers on all express trains, it gave to the public advantages which the private companies did not give.

Among the great companies, much the weakest financially was the Western. A large portion of its mileage was in Brittany, one of the poorest districts of the country. It did serve the town of Rouen, and the very important port of Havre, but the canalization of the Seine diverted from the railway a large proportion of the valuable merchandise traffic between Havre and Paris. The French Government guarantees the dividend on the shares of all the French railway companies, and year after year, the French Government had to find a considerable portion of the dividend to the Western shareholders.*

Further, large new capital expenditure was needed, especially to cope with the enormous passenger traffic of the company in the suburbs of Paris. How heavy that traffic is anybody who remembers the Saint Lazare station in Paris will know. The necessary capital could not be raised without Government approval; and Gov-

*It should be noted that only 10 per cent. of the total French railway capital is in the form of shares: 90 per cent. is in the form of bonds which practically, though not formally, are guaranteed by the French Government. The dividend on the shares therefore, though large in percentage—it ranges from 7 per cent. on the Western and the Eastern, and 10 or 11 per cent. on three of the other companies, to 13 per cent. on the Northern—is not very large in total amount. Broadly speaking, the companies, other than the Western, more or less earn their dividends in normal times without State help.

ernment approval, owing to strong parliamentary opposition, could not be obtained. Meanwhile the service was going from bad to worse, and the equipment was on its last legs. Something had to be done. Once more, the knot that could not be untied was cut. And as from January 1st, 1909, the Government exercised its rights under the concession, and took over the railway, continuing to pay the guaranteed dividend to the shareholders in the form of an annuity running till the termination of the concession.

The political history of the transfer is distinctly interesting. The employees on the railway itself were unanimously in its favor. And, as subsequent experience proves, with good reason. And the whole strength of the Socialist party and of Socialist sentiment was thrown on the same side. A majority was secured for the Bill in both Houses, though a large majority of the representatives of the districts served by the railway voted against it. The Bill passed the Chamber in December 1906. But it was hung up in the Senate for eighteen months till June 1908, and finally only passed by a majority of three votes, after M. Clemenceau, who was Prime Minister at the time, had given it to be understood that, unless the bill was passed, he would resign. And much as the majority of the Senate disliked nationalization, at the moment they disliked the resignation of M. Clemenceau even more. It may further be added, that according to the French custom, the opinion of all the Chambers of Commerce in the country, which are statutory bodies, was invited on the measure, and that not one single town of more than third-rate importance reported in its favor.

Experience of State Operation in France

Here in broad outline is the story of the result of the transfer.* In the five years, 1904-1908. before the transfer the gross receipts rose steadily from $37,084,000 to $42,145,000. In the five subsequent years 1909-1913, (the war upset entirely the figures for 1914) the gross receipts rose from $42,333,000 to $48,701,000, a slightly greater rate of increase. In the five years before the transfer, the oper-

*The figures given above are from official sources. The story is mainly taken from an article by Pierre-Leroy-Beaulieu, himself a Deputy, in "The State in relation to Railways." (P. S. King & Co., London, 1912.) See also Colson in "Revue Politique et Parlementaire" for November, 1910, December, 1911, May, 1913, and May, 1914. The railway newspapers all over the world were full of the story in 1909 and subsequent years.

Monsieur Colson, an engineer by training, was formerly head of the Railway Department of the Ministry of Public Works and is now President of the Section of the Council of State (a body partly executive and partly judicial) which deals with all questions concerning transport by rail or road or water. His book, "Transports et Tarifs," is a recognized classic on its subject.

ating expenses rose from $20,796,000 to $28,388,000, this last figure being unduly inflated by the fact that, from the date the Chamber voted the acquisition of the railway, the staff became entirely demoralized. The first year after the acquisition the operating expenses were $30,304,000. The next year they were $34,921,000, and the year after, $39,454,000. In 1912 they had reached $41,800,000 and for 1913 they fell back to $41,478,000. In other words, to earn a net revenue increased by 31 per cent., the operating expenses increased by 100 per cent. The net revenue was never below $13,757,000 in the worst year of Company rule. It fell to $5,352,000 after the Government had been in possession four years. The operating ratio, which had risen from 56.4 to 67.8 under the Company, was for the next five years as follows: 72.7, 79.9, 87, 89.4 and 85.2. It is fair here to make a qualification. The operating ratio had gone up on all the French railways between the two periods. It averaged 50.3 for the other five great companies for the years 1905 and 1906, and 58.4 for the two years, 1912 and 1913. But a rise from 50.3 to 58.4 is one thing; a rise from 56.4 to 89.4 is quite another.

A main argument used in Parliament in favor of transfer from the company to the State was that the company never did, and never could, earn its guaranteed dividend in full, still less the extra dividend which it would be entitled to if earned; that the company was accordingly a mere caretaker and not interested in financial results, and did not operate, and could not be expected to operate, with economy. The State on the other hand would have a direct interest in operating economically. That was the argument. Here are the facts. During the last ten years of company management, the State had to pay an average of $2,894,280 a year to meet its liability under the guarantee to make up the deficiency in net operating income. During the first three years after the transfer, the sums it had to find under the same head were $6,753,320, $8,875,792, and $14,934,484, respectively. For the year 1913, the figure was $14,752,237.

Nor do these deplorable financial results tell the whole story. The service to the public was absolutely demoralized. There were several very serious and numerous smaller accidents, and the staff and the public got so frightened that the express trains on the main line, already the slowest in France, were decelerated down to a timing that had been abandoned as inadequate in 1896. In addition, a number of trains were suppressed altogether. Punctuality went to the winds. Commuters on the system in the suburbs of Paris were compelled by their employers to live elsewhere because of the unpunctuality of their arrival at their work. As for the service in

general, one figure will suffice. Compensation for accidents, loss and damage, averaged some $400,000 or $500,000 a year in the last days of the company. In 1911, the figure was $2,045,291. The Minister of Public Works himself publicly criticized the State Administration as "a frightful fraud." And the Senate passed unanimously a resolution beginning: "The deplorable situation of the State system, the insecurity and irregularity of its workings."

M. Leroy-Beaulieu gives the reasons for the "deplorable situation" as follows: "In the first place, it is the abuse of formalism and red tape, with all the delays which follow and which are directly in conflict with commercial needs. In the second place, it is the lack of stability. The director and all the chiefs of the service change at the will of the Ministers, whilst in the private companies the higher personnel is maintained a long time, fulfilling the same functions. It is next the political influence which enters into the choice and advancement of the personnel. It is, lastly, the lack of discipline which also results from the political influence at work. *From the electoral point of view, the lower staff, being much more numerous, will always have much more power than the superior staff.* It is always on the side of the former that many Deputies will be systematically ranged. Above all, it is impossible to be at once controller and controlled. If one of the great French companies under private management renders poor service, the public opinion is not slow to move the public power, and as this has the means to bring pressure indirectly but in many ways upon the companies, they are led to reform. On the contrary, when complaints are made against the State itself, the administration, irresponsible, does not listen. Rather, it seems indignant that particular individuals or even large associations should dare to find that all is not perfect. 'I have not seen without a certain astonishment,' said the Minister of Public Works in the Chamber, 'the Chambers of Commerce criticise the actions of the State in its (their) reports upon the railways.' The same Minister has dismissed an employee from his office who was at the head of a section of a passenger line which emitted protestations against the delays on the Western State service in the Paris suburbs. When the Minister was reproached in the Senate, he declared himself ready to do the same again. One may see how dangerous to the liberty of citizens the extension of the industrial regime of the State would be, where the number of functionaries would be indefinitely multiplied and where they would no longer have the right to complain.

"From all points of view, the experience of State Railways in France is unfavorable, as was foreseen by all those who had reflected upon the bad results given by the other industrial undertakings of the State, such as the telephones, matches, and many

others. The State, above all an elective administration, cannot be a good commercial manager. It works expensively, and is powerless before its employees. The experience which we have recently gained has had at least one result. It has provoked a very lively movement, not only against the re-purchase of the railways, but against all extension of State industry. This result seems to me fortunate. I hope this opinion will be maintained, and that not only we, but our neighbors, may profit by the lesson of these facts."

M. Leroy-Beaulieu gives examples of what has happened under the various heads. "As for formalism and red tape," on the eve of the handing over of the railway to the State, there were 1,526 employees in the Central Office. Within three years the number had increased to 2,587. "The single service of the Accountant General was increased by 70 persons directly after the repurchase." And this was due partly to political pressure and partly to excessive red-tape. For example, in the Caen division, the preparation of the pay-sheets, which under the Company took nine persons three days =27 days, under the State Administration took twelve persons six days=72 days. "According to official documents, there are not less than 96 persons receiving a salary of more than $1,929.52 in the State system" as against 33 on the system of a neighboring company of much the same mileage but with much higher receipts. In the five years from 1908 to 1912,* the total expenditure increased $10,573,770, of which $8,412,707 were for salaries and wages. In 1908, out of every $19.30 of receipts, the Company paid $7.24 in salaries and wages. In 1912* this figure was $9.70. The comparative figure for the five great companies is only $5.70. In 1910, per $192,952 of receipts, the State railways employed 235 persons, the private companies 174.

Again, as the result of the great strike of October, 1910, the Chamber of Deputies voted a large all-round increase in the wages of the staff. Naturally, the staff thought there were shorter cuts to increases of wages than hard work. As a sample of want of ordinary business management on the financial side, the Budget Commission of the Chamber reported that it could not draw up a proper estimate for 1912 from lack of the necessary accounts. "The statements addressed to the Budget Commission by the Administration were manifestly inaccurate. The great part of the statements of receipts and expenditure were found to lack any sufficient justification. Thus as regards the expenditure upon personnel, the tables accompanying the statement only stated the numbers of workmen and staff and the amount of their salaries in round figures.

*1912 figures are Budget Estimates only.

We wrote for further statements, more particularly the numbers of the personnel. . . . The Minister replied (three years after the railway had been taken over) that the enumeration of employees had not yet been made. . . . This example suffices to show the trust that may be placed in the other parts of the budget estimate." This is not the opinion of an outside and unfavorable critic. It is the report of a Committee of the Chamber of the same political complexion as its predecessor which voted for the purchase, based upon a draft drawn up by a Deputy well known as an advocate of State ownership.

One story given by M. Leroy-Beaulieu is so striking as a sample of the highest quality of red-tape that it deserves to be given at length. It is from a letter of a stationmaster read in the Chamber of Deputies: "In the time of the Western Company, we stationmasters had orders to use the rolling stock as quickly as possible, and to send to a given station, all that we did not ourselves require. Under the State all is changed. Every stationmaster is forbidden to load any wagon without the orders of the distribution bureau of the district. This bureau is, as is well known, a new creation specially designed for the purpose of finding situations for so many more bureaucrats. Recently, having received two wagons loaded with horses, accompanied by an order to send these wagons to Caen after they were unloaded, I thought to do well by loading in these two wagons 200 sacks of grain, which had been waiting in the sheds for several days to go to Caen. But alas, I did not know the bureau of distribution. The next day I saw my two wagons return, and I received at the same time an order to unload them. I was reproved into the bargain for excess of zeal. I had to obey the order. That evening I sent the wagons empty to Caen. Next day I received two others, also empty, in which to load the grain."

The Lessons of Foreign Experience

Such is an outline history of the introduction of State ownership in the less important half of the railway world. What lessons has it to teach for the more important half, the United States and the United Kingdom? Evidently, in these two countries it will not be suggested that State ownership is necessary for political and military reasons. The consciousness of political unity needs here no artificial stimulus. The experience of England since the present war began has sufficiently demonstrated that a number of independent and often competing private companies can be welded together at a moment's notice into a homogeneous system, and oper-

ated from the moment when war is declared, with absolute success as an organic whole, under public control, on public account, for the public service.

Nor will it be suggested that in these two countries private enterprise has fallen short of meeting the public requirements. On the contrary, that England is adequately provided is admitted on all hands. And if, as is doubtless the case, the United States still need, and will continue to need, fresh railways built, past experience, which shows that in no other countries have railways been pushed so boldly in advance of population as in the States, gives every reason to suppose that private enterprise will be able and willing to provide them. And it may be added that the country which comes next in this respect to the United States—far in advance of the English colonies of Australasia, with their exclusively State systems, and of Russia or India, with their immixture of State ownership—is Argentina, also a country wholly developed, till quite recently, by private companies.

Railway history conclusively refutes the idea that State ownership promotes railway development. If we consider countries where the railways are already making a reasonable return on the capital, what do we find? Belgium has notoriously failed to keep its railways abreast of its rapidly growing trade. The Prussian Government has consistently for a generation past forced the enormous coal and iron traffic of Lorraine, Luxemburg and Westphalia on to the waterways, by refusing to build the new lines necessary to cope with the traffic by land. American shippers sometimes complain of shortage of equipment. But these complaints in times of worst congestion are not more bitter than those which go up regularly every autumn from the coal operators of the Ruhr Revier, the most important coal field in Prussia. In Australia the managements of the Government railways have boldly defended themselves in times of bad congestion by claiming that the railways cannot afford to keep sufficient equipment to cope with maximum demand. In the great Empire of India, with a teeming population of 315,000,000 spread over an area nearly two-thirds that of the United States, a population which though very poor is also very industrious, there are only some 36,000 miles of railway. That more railways and improvements of existing railways are urgently needed, is admitted on all hands. Nor is it denied that they would pay their way. But the Government refuses to allow private capital a free hand. A private company may build branches as feeders of the existing trunk lines on strictly regulated terms. But that is all. And yet the Government itself can only find a few million pounds per annum for

a work in which scores of millions could be profitably employed. The Dominion of South Africa, with a white population of a million and a quarter, has a State railway system of some 8,000 miles. In the much newer territory of Rhodesia alongside, company enterprise has already provided 2,000 miles of railway for the service of a white population of 32,000.

The reason is obvious. A railway company exists for a single end. If an extension offers reasonable prospect of financial success, and if capital can be raised on reasonable terms, a company will always build it. Even if success is problematical, ambition and the desire to forestall a possible intruder will usually turn the scale in favor of a forward policy. But a Finance Minister is in quite a different position. Calls upon him for money come in from a dozen different directions. The army, the navy, education, irrigation schemes, social betterment and fifty things more, all press their rival claims. The money is limited. New taxes do not conduce to popularity. The budget has to be made to balance and the railways go short like all the other claimants.

The experience of the last few years in the United States has, it must be admitted, shown that, under present conditions, private capital is not being found in sufficient quantity for extensions and improvements which are urgently necessary. And it has been argued therefore that the State will be compelled to come to the rescue by taking over the private undertakings bodily. But this is scarcely practical politics. To suppose that serious statesmen would, for this reason only, decide on a step so serious as railway nationalization, is to suppose the impossible. Taking over a quarter of a million miles of railway, with $16,000,000,000 net capital and over 1,800,000 employees, may be a good thing or a bad thing; but it is undoubtedly a step, the seriousness of which can hardly be exaggerated. To compare it in importance with the alternative of allowing the existing companies to raise their rates by an average of a mill per ton-mile, which would make all the difference between poverty and affluence would be almost farcical.

The argument for State ownership in the United States or the United Kingdom can therefore be based only on the claim that the substitution of Government for private ownership of the existing lines would, on the whole, secure better public service. A distinguished English authority, Sir George Gibb, has, in fact, put the question precisely on these lines. He has contended that, in Anglo-Saxon countries at least, it was entirely right that the construction and development of the railway system should be left to private enterprise. Private enterprise is, he thinks, bolder;

companies are more flexible, more ready to take risks and to try experiments in new methods, than any State organization could be. Moreover—and the importance of the point will not be lost on anyone who remembers that the bulk of the American railways have at one time or other passed through a receiver's hands, and that some forty per cent. of their share capital receives no dividend—if a company improvidently or unwisely invests its capital in a non-paying proposition, while private individuals lose their money, the public is uninjured. Capital borrowed on credit of the State is a permanent burden on the country as a whole, whether or no it earns any net revenue to pay the interest. On the other hand once the system is created and substantially finished, Sir George Gibb, in the paper referred to, considered it an open question whether State or private ownership and management should be preferred.

Cost of Raising Capital

It is this question therefore that we have now to consider. It is commonly claimed, as one of the advantages on the side of the State, that it can raise capital more cheaply than any private company. And the claim is not without substance. But the advantage is not great. The market value of United States Bonds cannot be compared with that of first class railway mortgage bonds, because of the fictitious value attached to the former for bankers' purposes. But in England over a series of years—though here, too, consols have to some extent had an artificial value—*the interest on first class railway debentures has averaged, perhaps, half of one per cent. above the interest obtainable on Government obligations.* At the moment of writing, while the English Government is borrowing on short term bonds at the rate of six per cent., first class railway debentures are still selling on the basis of less than 5 per cent. yield. And it is only the first charge securities of railway companies which can fairly be compared with the Government stocks; for the income return on junior securities, more especially common stock, includes a more or less considerable allowance for insurance against risk. Averaging the return on all capital invested in a successful private company, it would undoubtedly be considerably higher than the return paid to the purchasers of an equal amount of Government Railway Stock. But the Government Stock would unquestionably include a considerable amount of capital spent on railways not producing any, or only an inadequate, income, which capital, as has already been said, would have been in the case of a private company, either written down in market valuation, or, it may be, written off entirely.

Economy in Use of Capital

Further, though a saving of perhaps half of one per cent. in interest is not unimportant when the capital is reckoned in billions of dollars, it may be more than compensated for by a greater proportional increase in the capital itself. Is this likely to be the case? It is certainly the common belief of ninety-nine business men out of a hundred, both in America and in England, that the Government gets less value for its money than a private trader. So far as it is possible to compare one country as a whole with another, it certainly looks as if this belief were justified in railway experience. The railroads of the United States were capitalized in 1915 (deducting inter-corporate-ownership) at $66,447 per mile. The State railroads of New South Wales and Victoria were capitalized at $77,253 and $65,774 per mile respectively.* It must be admitted that the Australian roads, whose construction engineers had been brought up to regard English standards as universally applicable, are more substantially and expensively built than many of the Western roads of the United States. On the other hand, the American figure includes the trunk-line railroads of the East, with a standard of construction and a mass of equipment to which the Australian roads can offer no analogy. On the whole it is safe to say two things. If an experienced railway man came to America for the first time, and made an exhaustive examination of the United States railroads, he would marvel when told that so magnificent a machine had been built up at a capital cost of only $66,447 per mile. If an English or an American business man, fortified by the expert's opinion, were asked whether he thought his own Government could have carried out the work as cheaply, it is equally certain what his answer would be.

Summing up then the subject of capital cost, it would appear that, whereas on the one hand the State can obtain its capital somewhat cheaper, on the other hand private enterprise makes each dollar of capital go further. And the advantage and the disadvantage may fairly be set off, the one against the other.

*The cost per mile of the railways in the other Australasian colonies, and also in the Cape of Good Hope, is much lower than in New South Wales and Victoria. But they are all, with one partial exception, narrow gauge lines, and cannot be compared with the American railroads. The cost of the Canadian private roads is very much the same as the American average. The cost of the National Trans-continental railway recently constructed by the Canadian Government was estimated to be $39,083. It has actually cost $99,000.

Quality and Cost of Service

The vital question, however, is not concerned with construction and capital cost, but with the day-to-day working of the actual existing system. Will the public on the whole get better services or lower rates, or possibly both these advantages? On this question there is a mass of accumulated information that may help to an answer. But the difficulty of making a fair comparison between one country and another is exceedingly great. National customs differ widely. To give one striking instance. The average American railway charges its passengers two cents a mile, and admittedly makes no profit. The East Indian Railway charges four mills, and makes a handsome profit, because the Bengali ryot is content to travel under conditions of speed and accommodation and convenient frequency of service which imply reductions in operating costs more than counterbalancing the five-fold reduction of charge. And even the four mills rate is a much larger tax on the income of the ryot than the two cents rate is upon that of the American laborer, etc. What shall be said? Would it be reasonable to say that, all things considered, the passenger fares in America are really lower than those in Bengal, in spite of the fact that in Bengal a man can travel five miles at the price of one mile in the States? Must it not be acknowledge that, where conditions are so absolutely different, one cannot really compare, but can only contrast?

If comparisons are to be of value, they must be made where conditions are, if not similar—that we shall never find—at least as similar as may be. This much seems clear. Given two countries in which the standard of living and the purchasing power of money are substantially the same, and where the quality of railway service is substantially the same also, the country in which the rates charged are the lower is the country best served by its railways. If a country, where the purchasing power of money is low, obtains the same quality of service at a substantially lower rate than is charged in countries where the purchasing power of money is high, where, in other words, ordinary commodities are cheap, then surely that country has an exceptionally efficient railway service. Tried by this test, how does the United States stand?

It is a matter of common knowledge that the freight rates of the United States are out and away lower than those of any country with which comparison can reasonably be made. The figures of the average receipts per ton-mile for Germany and France are nearly double those for America, 1.37 and 1.30 cents per ton-mile

respectively as against 0.738 cents.* And all the other countries of Western Europe, except Belgium, are higher than France. The Belgian rate is 1.13 cents. As we get towards the east, rates fall. In Russia, the average is 0.94, in Japan 0.87, and finally in India, it gets down to 0.74 cents, which is practically the same as the American figure.

The reason why Oriental rates are low is obvious. Roughly half the cost of railway operation is direct labor cost. And in Japan a railway employee earns a dime, and in India a nickel, where in America he earns a dollar. Why then are not the rates still lower? Because it needs many Orientals to do the work of one American, with his efficient methods and his labor-saving appliances. To give one instance, railway embankments in India were till quite recently, and probably are still, constructed by gangs of coolies running to and fro with small baskets of earth upon their heads.

But let us leave India aside. Once more it is a contrast and not a comparison. Confining ourselves to Europe, we may say broadly that it costs as much to move a ton one mile in Europe as to move it two miles in America. And when all allowances have been made for circumstances tending to make European business more expensive to handle—short hauls, more diversified loads, higher cost of coal, and so forth—the 100 per cent. difference in rate is so great, that it seems impossible to doubt that a large part of it must be due to the greater efficiency of the American railway.

Prussia Compared with U. S. A.

The European country where the traffic conditions most nearly approach those of America is undoubtedly Prussia. In the years since 1880, by which time the railways had mostly been taken over by the State, the Prussian population has increased some 60%, and the urban population in a still higher ratio. The output of German, mainly Prussian, coal has grown from under 60 to over 250 million tons, and of steel from under 1 to over 17 million tons. And Prussia, is by universal consent, the country where State management is at its best.

*English figures are often given in international comparisons, but they are pure guesses. And how far the guesses are wide of the actual facts, no man can say. For English railways, with one exception, do not publish, or even compile, ton-mile and passenger-mile statistics. One company, the North Eastern, does compile these figures, and used to publish them, but has ceased to do so in recent years. Even if the recent North Eastern figures were available, it would be quite impossible to say how far they are typical of the English railways as a whole. The present writer's guess is that they are not typical, because, for one reason, the preponderating traffic, which is in coal, is carried for unusually short distances, and therefore at unusually high rates.

Let us take the claim of a panegyrist of the Prussian system, and see how it compares with American achievement. In a paper read at the Royal Economic Society Congress in London in 1911.* Professor Schumacher of Bonn gave two instances of the accomplishments of the Prussian railways: "In the case of goods sent in bulk, the freight for long distances is as low as 0.8 pfennigs per ton-kilometre." This is roughly 0.35 cents per ton-mile, which is very far from being a startlingly low rate in America, seeing that the average rate for coal last year on the Chesapeake & Ohio Railroad was only 0.304 cents, while for all traffic—high class as well as bulk freight, short distance as well as long distance—it was only 0.38 cents per ton per mile..

Professor Schumacher says further that "the receipts amounted in 1880 and 1909 to 4.14 and 3.54 pfennigs per ton-kilometre respectively (1.65 and 1.41 cents per ton-mile). They have therefore been reduced by about 15 per cent." The corresponding receipts per ton-mile for the American railways were, in 1882—the first year for which adequate figures are available—1.236 cents; in 1909 0.763 cents. In other words, the American ton-mile rate started at the beginning of the period 25 per cent. below the Prussian rate; and it fell in the course of the twenty-nine years, not 15 per cent., but nearly 40 per cent. At the end of the period, the American rate was not much more than half the Prussian rate—0.763 cents compared with 1.41. There are many elements, doubtless, responsible for so striking a difference. But, when all have been taken into account, a railway expert is bound to come to the conclusion that the main element is relative operating efficiency. To discuss this subject here at length is impossible. But one point may be taken. The incomparable cheapness of American carriage is primarily due to the employment of the largest possible units of car-load and train load. Less than thirty years ago, 8-ton coal cars could still be seen in Jersey City. Since then, the size of car has been increased to 30 tons, 50 tons, and now 70 tons and 90 tons. Prussia, not being hampered like England with high platforms and innumerable tunnels limiting the loading gauge, might well have followed the American example. But she has clung to the old 4-wheeled cars with an average capacity of less than 15 tons; with the result that, while the average American freight train has reached 500 tons, the Prussian load is 246 tons, or less than half the American.[1] And, to redress the balance, the American freight rate per ton-mile is half the

*The State in Relation to Railways, London, P. S. King, 1912.

[1]When the American rate was 1.236 cents per ton-mile, the train load was only 129 tons. It is mainly the increase of the train load to 500 tons and the consequent increase of the train-mile revenue to $3.74, spite of a 40% drop in the average ton-mile rate, which has made the modern American rate of .738 cents possible.

Prussian, spite of the fact that Prussian railways pay practically no taxes and that American wages are double those in Prussia.

It may be added that the progressive reduction of rates, of which Professor Schumacher speaks, had in fact ceased long before 1909. M. Colson writes: "The Germans no longer make any serious freight rate reductions. Within the last ten years, the average rate per ton-kilometre has oscillated between 4.41 centimes and 4.36 centimes per ton-kilometre (1.37 cents and 1.34 cents per ton-mile) according to the composition of the traffic. During the same period, the average rate in France has fallen from 4.71 centimes in 1901-2 to 4.19 in 1911, (1.45 to 1.3 cents per ton-mile) a reduction of 11 per cent." On the other hand, he adds, that "between 1905 and 1911, the average passenger fare fell in Germany from 3.22 to 2.94 centimes per kilometre (.99 to .902 cents per mile, nearly 9 per cent.), while in France it only fell from 3.69 to 3.50 centimes" (1.13 to 1.08 cents per mile, just 5 per cent.)[2] It may be added further that even the 15 per cent. reduction, of which Professor Schumacher speaks with pride, is largely due, not to reduction in individual rates, but to the increased proportion of the whole traffic which consists of coal, iron ore, and other raw materials taking the lowest rates.

Prussia Compared with France

But it is perhaps scarcely fair to compare Prussian railways with those of America. After the Battle of Salamis, Themistocles received by the vote of the Greek generals the first prize for valor. For though each general considered that he himself was entitled to the first place, they all agreed that Themistocles was entitled to the second. Similarly, though the railwaymen of other countries might each claim the first place in efficiency for themselves, there can be little doubt that they would all agree in giving their second vote to the United States. The railway service in America has attracted perhaps the best brains of the country. In Germany, military, naval and diplomatic careers, and even professorships in the Universities, offer higher inducements to their brightest men.

German railways, however, may be fairly compared with those of France, where Government service has a similar prestige. M. Colson has on numerous occasions compared the efficiency of operation of the two countries. *The comparison which he makes is in outline as follows:

[2]Revue Politique et Parlementaire, May, 1913.

*See Colson's articles in the "Revue Politique et Parlementaire" for May, 1902; May, 1904; May, 1906; May, 1907; November, 1910; December, 1911; May, 1913, and May, 1914. See also "Cours d'Economie politique" Livre VI 1907. The outline in the text is mainly taken from "Cours d'Economie Politique."

Prussia occupies a position naturally more advantageous than France from the point of view of economical operation. The country is almost wholly flat, while most of France is hilly, and a considerable part mountainous. Coal is immensely cheaper, and also steel. The traffic density is much higher, the number of units of traffic (ton-kilometres and passenger-kilometres) carried being more than double in Prussia, though the length of line is only 29,000 as against 25,000 miles. On the other hand it is to be admitted that the French length of haul is somewhat greater. The charges made for carriage are substantially identical in the two countries. There is a difference of about three per cent. in the average ton-mile rate in favor of Prussia. But this difference is very much more than explained by the much larger proportion in Prussia of coal, iron-ore and other bulk freight carried at the lowest rates. Taken separately, the average rate per kilometer for coal in 1905 was 3.10 centimes (.96 cents per ton-mile) in France, and 3.16 centimes (.98 cents per ton-mile) in Prussia. For all other freight, it was 5.07 (1.57 cents per ton-mile) in Prussia against 5.00 (1.55 cents per ton-mile) in France. But when the two came to be added together, the total result was 4.30 centimes, (1.34 cents per ton-mile) in Prussia and 4.52 (1.40 cents per ton-mile) in France. In the case of passenger traffic, M. Colson admits that the average rate is 12 per cent. higher in France. But he points out that 30 per cent. of the Prussian passengers are carried in fourth-class carriages, in which to a very large extent there are no seats, a class of accommodation to which France offers no parallel. Further, a much larger proportion of the freight traffic in Prussia is in straight carloads, loaded and unloaded by the shipper, services which are usually included in the French rate. Wages in France are at least as high, if not higher than in Prussia; and in addition to the wages, the French railways incur charges amounting to quite a high percentage of the total wage bill for pensions, superannuations and other benevolent purposes. Again, the French railways are subject to serious responsibilities from which the Prussian State Railways are free. In both countries there is a legal limit of time fixed within which traffic must be delivered at destination, and if this limit is exceeded the freighter is entitled to damages. But in France the period begins to run from the time the freight is brought to the railroad; in Prussia, only from the time when the railroad gives notice that a freight car is ready to receive it. The French railways are required to pay full compensation for loss, damage or delay. In Prussia, liability is legally limited to a fixed, and usuaally quite small sum, normally a certain

proportion of the freight charge paid.[1] Another fact which should tend to produce a lower operating ratio in Prussia than in France is that a larger proportion of the French traffic is passengers; and passenger traffic, under French and German conditions, is unquestionably less profitable than freight traffic. "From the combined effect of all these causes," writes M. Colson, "if the operating ratio in France were 10 or 15 per cent. higher than in Germany, it would not imply inferior operating ability. But in fact the difference is in the opposite direction. If our companies worked as expensively as the German State Railways, they would spend from twenty to forty million dollars more than they do per annum." The operating ratios as given by M. Colson for different dates are as follows:

	1900	1910	1911	1912	1913
	%	%	%	%	%
France	54	60	62.5	63	63
Prussia	62	67	65	66	66

The difference has lessened in recent years. But the explanation is that since 1909, the Western railway of France has been handed over to the State; and the operating ratio of this system has gone up to such an extent (it was 87 per cent. in 1911 according to the official figures used by Mr. Colson—though M. Le Roy Beaulieu[2] makes it to have really been as high as 90 per cent.—and 89 per cent. in 1913, as compared with an average of 60 per cent. for the five years before the purchase) as seriously to affect the French average. Thus, while the operating ratio for all the French railways in 1911 was 62.5 per cent. as given above, for the private lines only it was 58.5 per cent. So it appears that the divergence of 7 or 8 per cent. in the operating ratio between the French companies and the Prussian State railways remains substantially the same over a series of years. And the fact that the expenditure on the Western of France has, since that system was taken over by the State, increased out of all proportion either to its own previous expenditure, or to the expenditure still found sufficient on the remaining private railways, clearly affords no argument for the economical management of the Prussian State.

New South Wales Compared with Texas

Let us attempt another comparison. To compare Australia as a whole with the United States as a whole, though the two areas are very nearly the same, would be unreasonable. Australia, with only

[1] A full account of the stern restrictions with which the liability of the German State Railways is fenced round will be found in "German v. British Railways," by Edwin A. Pratt (P. S. King & Co., London, 1907). Mr. Pratt quotes a statement made to him by a large German trader that, sooner than send in claims which they would have no chance of getting paid, "they had better save the postage stamp."

[2] The State in Relation to Railways, p. 55.

five million inhabitants, has nothing comparable with the enormous traffic of the North Atlantic States. But a comparison between New South Wales, the oldest Australian Colony, and Texas seems to be fair, and is not without interest.

New South Wales, with 310,000 square miles, is not dissimilar in area from Texas with an area of 262,000 sqare miles. But Texas had a population at the census of 1910 of 3,900,000, while the population of New South Wales was only 1,650,000. The New South Wales population is not only smaller, but is increasing less rapidly. In the ten years 1901-1911, it only increased from 1,359,000 to 1,648,-000, or 21 per cent. In the same period the population of Texas increased from 3,049,000 to 3,897,000, or nearly 28 per cent. But while Texas with double the population had, at the census of 1910, no town of over 100,000 people, no less than 621,000 of the inhabitants of New South Wales lived in Sydney and its suburbs. It is safe to say that a chief cause—if not the chief cause—of the smaller population of New South Wales, and its concentration in and around the capital, as compared with the larger and better distributed population of Texas, is the difference in the railway development and service of the two countries.

Texas has over 15,000 miles of railway against 4,000 in New South Wales, giving a mile of line for every 259 inhabitants of Texas, as against a mile of line for every 412 inhabitants in New South Wales. Certainly the New South Wales Government does not seem to show to great advantage as compared with private companies, so far as enterprise in opening up new country is concerned.

Now let us see whether the railways that have been constructed in New South Wales serve the public better than the railways of Texas. The average rate in Texas per ton-mile in 1915 was .995 cents, and the average rate in New South Wales for the same year, inclusive of terminals, which the official statistics leave out in their ton-mile calculations, was 2.20 cents, or more than double. It is true that the average fare per passenger mile in New South Wales, where it is pulled down by the enormous commuters' traffic of Sydney, was only 1.15 cents, as against 2.42 cents in Texas, or less than half. But no one will suppose that low rates for passengers are as important to the prosperity of a country as low rates for goods. And, besides, whereas the average passenger journey in Texas was 53 miles, and in New South Wales only 14 miles, the average distance a ton of freight was hauled was 135 miles in Texas, as against 79 in New South Wales.

Comparing the work done for the public in the two States, we find that in Texas 7,360,000,000 tons were hauled one mile; in New South Wales only 917,000,000. Passengers hauled one mile were,

on the other hand, 1,231,000,000 in New South Wales against 1,007,-000,000 in Texas. Putting the two together we have 8,367,000,000 traffic units (one ton or one passenger carried one mile) in the year in Texas against 2,148,000,000 in New South Wales. In other words, the private railways of Texas performed for the Texan public nearly four times as much work as the New South Wales State railways performed for the public of that State.

The traffic density is very mch alike in the two cases: 515,000 traffic units per mile of line per annum in Texas; 530,000 in New South Wales. The Texan railways have a considerable advantage in better gradients and longer hauls, and for both these reasons lower rates in Texas might naturally be expected. But the difference is far too great to be explained on these grounds. Per unit of traffic carried the public were charged in Texas 1.17 cents, in New South Wales 1.60 cents, nearly half as much again.

As the result of their high rates the New South Wales railways earned $9,140 per mile of road per annmu. As the result of their low rates the Texan railways earned only $6,592. But, thanks to superior efficiency of management, the Texan railways spent much less to carry each unit of traffic. Per unit the Texan railways spent 0.935 cents; the New South Wales railways spent 1.115 cents. In other words, had the Texan railways operated as expensively as the New South Wales railways, they would have had practically no net revenue at all.

One point more: the Texan railways have had to raise their capital as best they could and could do very well with more of it. Were they in a position to raise new capital on favorable terms, they could doubtless improve their operating efficiency still further. The New South Wales railways can raise, and always have been able to raise, on the government credit all the money they need at the lowest rate of interest. Will any one deny that, even handicapped as they are, the private railways of Texas are giving to the people of Texas a more ample, a more efficient, and a cheaper service than the government of New South Wales gives to its citizens?

Private Railways Lead in Inventions and Improvements

To turn from specific comparison to more general considerations. The fact has already been mentioned that, while the American companies have boldly revolutionized their machinery and methods of carriage, the Prussian State has clung to old machinery and old methods. The huge engines and freight cars used in America today could never have run on the rails or crossed the bridges as they existed in 1880. So the American companies have laid ever heavier

and heavier rails, and have rebuilt their bridges, often more than once. The Prussian State is content to put forward, as a sufficient reason for adhering to the old methods, the fact that track and bridges are not strong enough to carry the heavier equipment.

This example is typical. In all the history of railway development, it has been the private companies that have led the way; the State systems that have brought up the rear. It would be difficult to point to a single important invention or improvement, the introduction of which the world owes to a State railway.* England shares with America the credit of having invented the locomotive. England first rolled steel rails, but America was not long behind. England first introduced the block system of signaling; while to America is mainly due the later development of automatic appliances. There are two types of power brakes on the world's railways. The Westinghouse brake was invented in America, the vacuum brake in England. The automatic coupler is wholly American. So are the sleeping car and the dining car. Shunting by gravity, which accounts for a saving of millions of dollars a year, was invented in England, but has been mainly developed in America. Brunel, on the Great Western of England, first taught the world what express trains meant. And forty years later, the English companies in the historic "Race to Edinburg" in 1888 gave a new interpretation of the term. America promptly replied with the "Empire State Express," and bettered the instruction with the "Atlantic City Flyers." The French companies, too, took up the challenge, and put on trains from Paris to Calais, and to the Belgian, German and Spanish frontiers, that could hold their own with anything that England and America had to show. And meanwhile the International Expresses of Prussia and Belgium jogged contentedly behind. It is true that in these two countries the track was not fit for high speeds. Nor was it at the outset in France or America. But it was possible to make it so—at least where it was in the hands of a private company. Take the latest problem of all, the electrification of main lines with dense traffic. Electric working is constantly pushing out from New York and Philadelphia, from London and Liverpool and Manchester. And, meanwhile, the Prussian Government has carried out some interesting and exhaustive experiments on a special track at Zossen.

Railroading is a progressive science. New ideas lead to new inventions; imply new plant, new methods. And this means the spending of much new capital to be recouped by larger economies

*Possibly the Schmitt locomotive superheater might be claimed by the German railways as an important improvement of which the credit is theirs.

later on. The State official mistrusts ideas, pours cold water on new inventions, grudges new expenditure. No one questions the ability of the German people. German manufacturers, German merchants, German bankers have taught the business world a good deal in recent years. German railwaymen have written many books, some of them valuable; but in practical operation they have taught the railway world nothing. Why? Is it because they are State Officials?

English Government Management of Telegraphs and Telephones

Certainly English experience of undertakings in the hands of public authorities would lead us to suppose so. English experience confirms the conclusion of the Italian Commission of 1881 that "the State is more likely to tax industry than to foster it." Fifty years ago, the English Government acquired the telegraphs. Three official estimates of the cost of acquisition were put forward. The first was for $11,679,600; the second was for $29,199,000, and the third was for $32,848,875. According to the official figures, the capital account was finally closed with a total expenditure of $52,887,289. On the basis of the $29,199,000 capital cost, the Post Office estimated to obtain an annual net revenue of $987,900. The fact had been that, on the average of the last ten years, there has been a loss of more than $4,866,500 per annum.

The Act authorizing the Government to acquire the undertakings of the Telegraph Companies was passed in 1868. In the following year a further Act was passed giving the Post Office the monopoly of the business. When telephones were invented the Post Office did nothing to encourage their development. It merely looked on while private companies undertook the work. As soon as it became evident that the thing was serious, the Post Office took fright. and started out to defend its monopoly. After long litigation, the Supreme Court of Appeal decided that a Statute passed many years before telephones were born, giving the Government the monopoly of telegraphs, extended to all forms of electric communication. And thereupon, the Post Office proceeded to handicap its rival by imposing a license fee of 10 per cent. on all telephone gross receipts. Not content with this, it took all the trunk lines into its own hands, leaving the company only the local exchanges. It reserved certain areas for itself, characteristically giving in these areas, except in quite populous places, telephone service only from 8 a. m. to 8 p. m. on week days; whereas all the company's offices were open continuously. And last, not least, it only granted short term licenses, so that the company had difficulty in raising necessary

new capital. Spite of all these difficulties, the company managed to pay a fair dividend, till finally in 1911 the licenses expired, and the Post Office took over the whole business. It has already succeeded in converting a surplus into a substantial deficit. And one is keeping well within the facts to say that, so far, the service to the public has not improved.

The English Post Office has made yet another, though less important, effort in the direction of "taxing industry rather than fostering it." It had been urged for many years to establish a special delivery service for letters, and had steadily refused, alleging that there was no substantial public demand. Some five and twenty years ago, an enterprising company started in London a District Messenger service. It was found to meet a real need, and seemed to be likely to establish itself successfully. Thereupon the Post Office, which has a statutory monopoly of the carriage of letters, promptly took action. It began by hampering its more nimble rival with a heavy license duty, and it went on to establish a service of its own, which, though less convenient and flexible, was considerably cheaper. Naturally the company was hard hit, and it has only maintained its existence by undertaking other work, such as that of a theatrical ticket agency. The net result is that London has two inferior services instead of one good one. Whether the Post Office makes a profit or a loss, the published accounts do not show.

Municipal Electricity in England

England is admittedly behind her two great commercial rivals, the United States and Germany, in the application of electricity to commercial purposes. And this we owe to the fact that the municipal authorities have faithfully followed the lead of the Post Office. Gas lighting was introduced all over the country by private companies; but the gas undertakings in most of the important cities have long ago passed into the hands of the municipalities. And as a rule, as private enterprise had piloted them safely through their early stages of development, they have been the source of considerable profits to the City Exchequer. About thirty years ago, when electric lighting first became commercially possible, Parliament, by an Act passed in 1882, and an amending Act passed in 1888, laid down a general code regulating the subject. Broadly to this effect: Either a company or a local authority may apply to the competent department of the Government, the Board of Trade, for an Order—or, in American phrase, Charter. If both a company and a local authority apply for an Order relating to the same area, it is the application of the local authority only that is granted, unless

under exceptional circumstances. If an Order is granted to a company, it expires after 42 years. The original period was only 21 years; but it was found that on this condition no company could raise capital. If an Order is granted to a local authority, it is in perpetuity. The Order gives to the grantees, unless and until a new Order admits a competitor, which in practice never now happens, a monopoly of supply within the scheduled area. The Board of Trade has wide discretion to revoke the Order, where the grantees have not substantially carried out the works projected, or where they fail to furnish a satisfactory supply. The upshot of these conditions has been this. At the outset, a large number of local authorities applied for Orders, apparently merely with the object of keeping out private enterprise, for they took no steps whatever after they had obtained their Orders to put them into effect. After considerable delay, the bulk of these blocking Orders were revoked, but private enterprise had meanwhile been effectively warned off. When at length, it became evident that public electric supplies must come, in some areas companies were grudgingly admitted; in other areas, the local authority undertook the work itself; whichever happened, it was a very frequent complaint that the local authority was more concerned for the protection of the existing revenue from its gas undertaking, than for the development of the new force, which science was ready to put at the disposal of the public.

A later phase of the situation came into view when the suitability of electricity, not merely for lighting, but for power purposes, became manifest. A municipality could not legally supply beyond its own restricted area. And industrial districts in their development pay no attention to city boundaries. Numerous companies, influentially supported, brought forward schemes of wholesale generation with modern plant for large districts. A good many Orders were granted. Only one of the schemes has been even a moderate success. And a chief reason has undoubtedly been that the municipal authorities of the important cities geographically included in the various districts fought successfully to deprive the power companies of the right to supply within their cities, alleging that it was not in the public interest that private companies should, for selfish ends, compete with undertakings carried on at the public expense and for the public benefit. And so England is still mainly given over to small separate undertakings, which cannot, in the nature of things, give a cheap supply, and which, in many cases, are unable to give a supply on such a scale as would be necessary, if a large manufacturer desired to substitute electricity for steam as the motive power in his factory.

Other instances might be cited from English experience. But the above are sufficient to show that in England at least the official is not eager to foster industry; that he will fight to mainain the acquired situation of his public undertaking, however much it may be in the interest of the public itself that the situation should be modified. It might have been expected, *à priori,* that public officials, having only the public interest to serve, and having no shareholders to whom increase or decrease of profits means increase or decrease of dividends, would be more ready to take reasonable risks, more complaisant, less meticulous to protect their undertakings to the utmost, than the managers of commercial companies. But experience shows that the reverse is the case. The careful Prussian regulations limiting, and in practice usually excluding altogether, the liability of the railway administration for delay, loss or damage of freight, have already been mentioned. It may be added that the Prussian railways have an elaborate system of "delivery insurance" under which, by making an extra payment, the shipper, if the ample legal limit of time for transportation is exceeded, can recover some extra compensation from the railway. It is difficult to imagine what would be the attitude of a shipper in England or the United States, if he was asked to insure at his own expense the fulfillment by the railway company of its common law duty to him to deliver his freight within a reasonable time.

In every country where railways are highly developed, rates for freight consigned in full carloads are lower than for freight consigned in retail quantities. And the practice is abundantly justified, commercially on the ground that the wholesale price is always less than the retail, and technically on the ground of the saving of operating cost to the railroad. England, where the public stil persists in regarding a railway truck as only a slightly modified carrier's cart, makes the least reduction, averaging perhaps 15 to 20 per cent. France makes more. America, which usually concedes the reduction of 2 classes in the Classification, makes more still. But Prussia goes much further than any other country. Freight, not classified as entitled to exceptional rates, and therefore carried at the rates of the normal tariff, is charged in he ratio of 9 to 4, according to whether it takes the 10-ton or the package-freight rate. And, as a result of this method of charging, 95 per cent. of the Prussian traffic is in carload lots. The system is highly convenient and profitable to the railroad, for it evidently leads to the more economical occupation both of the road and the freight cars. Whether it is equally in the public interest is more than questionable. Assume that a

freighter at a way-station 20 miles west of Berlin wishes to send 2 tons of merchandise to a similar station 10 miles short of Frankfort. He has two courses open to him. Either he can send it direct; if he does he will be charged 4.5 cents per ton per mile. Or he can hand it over to a "spediteur" or forwarding agent. In that case the "spediteur" will take it back to Berlin at the L. C. L. rate, send it thence to Frankfort as part of a 10-ton consignment, and thence reconsign it back to its destination as package freight. The consignor will gain something in money—the smallest proportion, namely, of the difference between the package freight rate and the sum of the three rates paid by the "spediteur" which the "spediteur" thinks will induce the consignor to continue to deal with him in future. But he will hardly gain in promptitude of delivery. Can it be doubted that in this instance it is railroad interest rather than public convenience which is primarily regarded?*

Here is a comparison on all fours of English and Prussian methods. In England any respectable shipper, and indeed any private individual, can open what is known as a "ledger account" with the railway company. He then obtains practically two months' credit for the carriage of his shipments. The account for each months is rendered by the company to the shipper at the end of the month, and then the shipper has another month in which to pay. Oftentimes the month is exceeded. If the shipper disputes any item, on whatever ground seems to him sufficient, he strikes it out and only pays the balance. And the railway submits as of course to the charge remaining in suspense till the matter is settled. In Prussia, a shipper can open a monthly account, provided his average freight payments amount to not less than $75 a month, and provided he deposits with the railway administration cash or securities equal in value to one and one-half times his average monthly account. If in the course of the month his shipments reach the value of the securities deposited, he must either increase his deposit, or pay prompt cash for the rest of the month. That this difference of method is not due to the fact that the railways are, in the one case, in England, and in the other, Prussia, but rather to the fact that in the one case, they are in the hands of private companies, and in the other in those of State Officials, may be concluded from the attitude of the State in England in the case of those commercial undertakings which it does manage. In England, the maintenance of a deposit covering prospective telephone calls—or rather two deposits, one for

*It should be further noted that these "spediteurs'" charges, which are not inconsiderable in the aggregate, should be added to the railway freight rates, if we wish to estimate the total rates paid by the Prussian shipper as compared with his competitors in other countries.

local and one for long distance calls—is as rigidly insisted on as is the corresponding deposit by the Prussian State Railways; and a householder, who neglects to replenish his deposit when exhausted, even though it may be only a few shillings overdrawn, finds his telephone service cut off without more ado. As for liability for loss and damage, the regulations are sufficiently frank and drastic. "The Post Master General is not liable for any loss or damage which may be caused by the failure of any telephonic communication, whether such failure is, or is not, due to the act or default of any officer of the Post Office." And the regulations in respect of the telegraph service are to the same effect. Can such regulations be justified in the public interest? Can it be right that the public in its corporate capacity should refuse justice to its own individual members? Can these regulations be explained, except on the theory that they are imposed by the State Official for his own convenience, and submitted to by the public, because, while individuals can invoke the aid of the State against a powerful private corporation, they have no means—unless in the last resort and in cases of supreme importance—of redress against the action of the State itself?

Civil Service Rules and Promotion by Merit

To turn to a different point. Railway management, on its main sides of policy, operation and traffic, is essentially a commercial business, requiring commercial training and commercial apitude. The railwayman, if he is to serve his customers and his shareholders properly, must look ahead, plan boldly for the future, and not fear to take risks. His mind must be alert to recognize and use every new technical improvement, that so he may give the best possible service at the minimum possible expense. He must be quick to observe the course of trade, the changes of demand, the potentialities of new markets and new sources of supply, and to adjust his tariffs accordingly. Above all, he must keep abreast of his work, however arduous, even though it means working all day and half the night, and double tides on Sunday. If he fails—at least in the employ of a private company—he goes; and a better man takes his place.

Can we expect these qualities from a State official? Let the Italian Commission answer. It is true they wrote 35 years ago, but human nature has not greatly altered in the interval. "On a State railway system, the personnel would be chosen according to Civil Service Rules. Seniority would count more than merit or special qualifications. . . . There would be bureaucratic dilatoriness, incompatible with railway service. This applies specially to the executive officers, who need to have, in the highest degree, in-

dustrial energy, initiative in planning improvements, commercial intelligence essential in controlling the various classes of expenditure; who have to encourage traffic, improve service, maintain discipline, and so forth. The chief officers and their staff must have a personal interest to stimulate them, and a high sense of responsibility to encourage them to perform their duty. And for men like these, the State would substitute officials with no personal inerest in the operating results. Further, the Government employee is, as a rule, worse paid and subject to less severe discipline than men in private employment, and consequently, he does less work.

"When the operation of the Upper Italian Railways was temporarily taken over by the State, only a short time elapsed before the discipline, energy and prompitude of the staff, which had been excellent, broke down, and the service became abominably bad. The general rule is that Government employees do less work; consequently more men have to be employed; and the wages bill accordingly goes up."

That on this last point, the Commissioners were true prophets, the Italian experience since 1909, which has been recorded already, sufficiently shows. As for "industrial energy," "initiative in improvements" and "commercial intelligence," let the Prussian history of unchanged methods and cast-iron tariffs testify. But there is a more important point than these. There is general agreement, both in America and England, that, to avoid the worse evil of political patronage, appointments in the public service must be made by Civil Service methods. This means appointment by an examination, mainly literary, at an early age; a life tenure except in cases of gross incompetence; and promotion mainly by seniority. Will any human being claim that American railroads would have achieved their magnificent record of technical progress, of rates steadily reduced in face of a steady rise, not only of railroad wages, but of prices of almost all other necessities of life, if the management of the railroads had been in the hands of men originally selected by an examination forty years before, who had since risen to the top, not as the result of conspicuous competence, but by sheer seniority? And would the men who are now at the head of the railways have stopped in the Government service, had they entered it as young men, if they had only had the prospects of promotion and compensation which Government service affords?

Possible Abuses of Private Ownership

At this stage it may be fairly said "Granted that State railway systems, like all other human institutions, are far from perfect, what about the abuses of private ownership?" And the point is a fair

one. It might well be that the abuses of private ownership are so great that State ownership implies, at least, the lesser of two evils. How do the facts stand?

In he old days in England, there was a saying of an Official of the Board of Trade,—afterwards well known as a Director of one of the great English railways and President of the Grand Trunk Railroad of Canada, Sir Henry Tyler,—which became famous: "If the State does not control the railways, the railways will control the State." And thirty or forty years ago, when the railway directors were strongly entrenched in a House of Commons elected on a very restricted suffrage, the phase perhaps represented something more than a mere rhetorical exaggeration. In reference to England, as it is today, the idea is only laughable. The railways are absolutely powerless to resist public opinion. Five and twenty years ago, the House of Commons threw into the waste paper basket the original Schedules of Maximum Rates—on the faith of which private capitalists had embarked five billion dollars in constructing railways. After an inquiry lasting over ten years, they formally enacted new Schedules of Maximum Rates which the companies "might lawfully charge and make." The companies were so ill-advised as to take Parliament at its word. And they proceeded in many instances to "charge and make" accordingly new rates which implied considerable advances on the scale then in force. Shippers rose in revolt and refused to pay. In the very next session, Parliament deprived the companies of the power which it had given, and enacted that thenceforward no railway company should increase any rate to which one single shipper objected, unless the company could prove affirmatively in a court of justice that the increase of rate was justified by increased cost of doing the business. Similarly in America. There was a time—it will hardly be denied by anyone today—when the great railroads had inordinate powers, and those powers were concentrated in the hands of a single man. Not only might he abuse them for private interest, but in any case the powers were despotic. And democracies will not tolerate despotisms, even if benevolent. But the president-despot—benevolent or otherwise—has long been dead. And his day returns not. Serious critics, both in England and America, have questioned whether private capital will continue to invest in raliways, if the State continues to interfere so drastically both with operation and with rates. But no-one is heard seriously to assert that Parliament and Congress lack the power to make their will effective, whatever the railroads may say or do.

A main argument put forward in favor of the nationalization of railways in Prussia was that the tariff system of the private com-

panies was honeycombed with rebates, and that rebates were inevitable under private ownership. If this latter statement were true, it would be sufficient justification for sweeping away private ownership, without more. But it is not true. If, after seventy years of private ownership in France, no suggestion has ever been heard that rebates are there given, it is fairly safe to say that they have not been given. In England there were undoubtedly special favors given to certain freighters in the very early days, not probably from corrupt motives, but merely as a matter of commercial custom. To big customers and keen bargainers rate concessions always had been given by the carriers, whether by road or by canal, and at the outset there seemed no reason why railroads should not follow the example. But as long ago as 1854, in words that were practically copied in the original United States Act to Regulate Commerce thirty-three years later, the English Parliament enacted that rates should, under the same circumstances, be the same to all; and that, if circumstances were different, the difference in rate should be proportionate to the difference in circumstance. And thereupon, rebates disappeared from English railway history. "It is remarkable"—the words are those of a House of Commons Committee reporting in 1882 after an exhaustive investigation "that no witnesses have appeared to complain of preferences given to individuals by railway companies as acts of private favor or partiality, such as were more or less frequent in the years before the Act of 1854." One still sees, from time to time, fines inflicted upon American railroad companies for offences of this nature. But in almost every case, the transgression had occurred some years before the infliction of the fine. It is safe to say that nobody in America today believes either that secret rebates exist to an appreciable extent, or that the railroad officials desire to revive the practice of giving them.

Somewhat analogous to direct rebates are concessions given to traders and other persons, whom it is desired to influence, by liberal payment of claims for loss and damage of freight, by under-classification, free transportation and so forth. In France, with a non-competitive system, such practices have apparently never existed. In England they have never cut much figure; and as long ago as 1902, the establishment of a Joint Claims Committee by the companies themselves, put an end to such abuses in this respect as did exist. Free passes in England have never been an abuse, of which the best proof is that they still remain unregulated by law, and a manager can any day privately give a free pass to whom he pleases. That free transportaion and the payment of bogus claims were serious abuses on the American railroads not so many years ago is undeniable. No one doubts that they are practically eradicated today. And,

after all, the abuse of free transportation is not confined to private railroads. Not very many years ago, the "Melbourne Age," the leading paper in the Australian State of Victoria, published a list, occupying eleven and a half closely printed columns, of free passes granted by the State railways to the relations and friends and dependents of Members of Parliament.

State Railways Not Usually Profitable

Our history has then reached this stage. In the two countries where the railways are still wholly in private ownership, the United States and the United Kingdom, nationalization cannot be justified on the ground of lack of private enterprise. Nor is it necessary to avoid abuses; for those abuses can be either prevented or cured by adequate State regulation and supervision. Further, it does not appear that the State is likely to build railways cheaper. Still less, that it will surpass private companies in efficiency of management, and will therefore have available more net revenue to be applied either to improvement of service or reduction of rates in the country as a whole.

With the exception of the South African Dominion—whose railways are not, however, important, and which owe their moderate success to the fact that the great mining community of Johannesburg, importing almost everything it consumes, and accustomed to pay gold miners' prices, is many hundreds of miles from the sea—Prussia is the only country where the State system shows a substantial profit after payment of operating expenses and interest on capital. And this fortunate position Prussia owes to two things. It bought the railways at a most opportune moment, just before the great industrial and commercial development that has made modern Germany; and the Government has been powerful enough to maintain the scale of rates, as we have seen, practically unaltered over a long series of years. Belgium roughly makes both ends meet. Switzerland the same. The smaller German States and the Australasian Colonies, speaking broadly over a series of years, have to make up some part of their interest charges out of general taxation. Austria, Italy, and France on its State railways, as we have seen, produce deplorable financial results.

Is State Management More Equitable?

It is, however, claimed that the State would apportion its favors with a more equal hand; would level the backward parts of the country up to the standard of the better developed; and adjust rates and fares more equitably. These were promises made by the

Prussian Government when they took over the railways. And so far as the first half of the promise, the extension of the railroads into poor districts, is concerned, unquestionably it has been fulfilled. But the reason is to be found, not in the beneficence of the State, so much as in the fact, that the only power in Prussia that counts, beside the Throne, is that of the agrarian party, the Junkers. Partly owing to their hereditary influence over the Executive government, and partly to the fact hat the agricultural disricts are enormously over-represented in the Prussian Parliament, they have succeeded in getting a good share of the surplus revenues from the manufacturing districts devoted to developing their own estates. On the other hand, as has already been mentioned, when it comes to tariffs, no counry has gone as far as Prussia in giving advantage to the big shipper over the small man.

In Australia undoubtedly railroads have been built in backward districts which private enterprise would never have touched. But if a railroad, after being open for traffic for ten or a dozen years, still hardly does more than pay its operating expenses, it is safe to say that it is not an undertaking which would have been entered upon at all by a prudent management, had it been free to spend its capital where it would do most good to he public as a whole. In other words, the reason why such a line was built was political pressure. And that such lines are common enough all over Australia is sufficiently well-known. Indeed, the report of the Victorian State Railways for 1907 gives a list of seven branches, with an aggregate length of 46 miles, constructed at a cost of $1,883,336, which were closed for traffic at various dates between 1898 and 1904, and abandoned altogether because gross receipts failed even to cover operating expenses.

The claim that the State will adjust rates and fares more equitably is more difficult to deal with. The famous Prussian Finance Minister von Miquel asserted categorically that the only possible policy for a State system was to adopt a rigid tariff uniform over the whole country. And that is, in fact, the Prussian system of today. For 500 miles the rate is ten times that for 50 miles. Whether this equitable is another question. It certainly does not cost the railway ten times as much to do the business. Nor does it seem to be treating the shipper in accordance with the canon of taxation which says that the end to be aimed at is equality of sacrifice by the taxpayer. But, be that as it may, while such a policy is possible for Prussia, with only a small seaboard, and where the Government owns, not only the railways, but the canals, it is unthinkable in England or in America. Imagine an English Govern-

ment charging from London to Edinburgh ten times as much as for the first forty miles out of London. The only result would be to drive the whole of the traffic to the coasting steamers. As for America, the thing is still more impossible. To quote an extreme case:—the fact that, after years of deliberation, the Inter-State Commerce Commission has finally decided that it is reasonable to charge more for a car-load of freight from Chicago to Denver than from New York to San Francisco is sufficient, without more, to show that American railways, even under public ownership, would need to maintain tariffs in broad outline such as those existing today. Certain modifications might, and, no doubt, would, take place gradually; but the essence of the thing would needs remain unchanged. Tariffs, that is, would continue to be dictated, not by *à priori* theories, but by economic necessities. And such tariffs, one might say further, would continue to be denounced as unjust and unreasonable—as the Inter-Mountain Rates have been for a generation by the citizens of Colorado—by those whom they appeared to prejudice, and who would naturally lay the blame on the railroad managers whom they see, and not on nature and geography which keep in the background.

National Railways in a Democratic State

We come now to a more important point, a point which may probably be said to be of more importance than all the others put together. Prussia is undoubtedly the most successful instance of State Railway management. Reasons have been given already for thinking that the Prussian success, achieved under uniquely favorable circumstances, is not so much to boast of after all. But let it be admitted for the sake of argument that the success is as brilliant as it appears to the imagination of the most enthusiastic German professor. The point cannot be too much insisted on that the success of the Prussian autocracy is no argument for similar success in the hands of English or American democracies.

A great American, who has passed over to the majority within the last twelve months, Mr. Charles Francis Adams, put the matter nearly forty years ago in words that have so often been quoted that they have become classic:

"In applying results drawn from the experience of one country to problems which present themselves in another, the difference of social and political habit and education should ever be borne in mind. Because in the countries of continental Europe the State can and does hold close relations, amounting even to ownership, with the railroads, it does not follow that the same course could be success-

fully pursued in England or in America. The former nations are by political habit administrative, the latter are parliamentary; in other words, France and Germany are essentially executive in their governmental systems, while England and America are legislative. Now the executive may design, construct, or operate a railroad; the legislative never can. A country, therefore, with a weak or unstable executive, or a crude and imperfect civil service, should accept with caution results achieved under a government of bureaus."*

A railroad is a great business concern. And as every business man knows, a business concern, if it is to prosper, must have a single directing mind at the head. Under an autocratic system, the head is the Minister of Railways ultimately responsible to the Monarch, and to him alone. He may consult his customers, passengers and shippers, listen to their grievances and welcome their suggestions—the Prussian Government has an admirably organized system of district and national councils for this very object. But he alone decides. The King of Prussia is as really the head of the railroads as he is the head of the army. Between a railway chief in this position and a Minister in a democratic country, changing every few years as his party goes in or out of power, liable at any moment to be out-voted if he refuses a concession that a substantial section of members of the legislature combine to demand, no comparison is possible. "The executive may design, construct, or operate a railroad." And this is what happens in Prussia. "The legislative never can," and in democratic countries it is the legislative branch of the Government which not only decides policy but dictates always in main outline, often down to the detail of a particular appointment or a special rate, how the policy shall be carried out.

It may be objected that in every country, whatever be the form of Government, the State runs the Post Office; and in almost every country the telegraphs, if not the telephones also. If it can manage these, why not also railroads? The answer is that between these two classes of business there is no analogy. The Post Office is a purely executive business, with no commercial side to it. Uniform rates, two cents or a penny or whatever the figure be, equal for all distances, are accepted as a matter of course. The amount is so small that nobody objects. If the charge for a letter were, not two cents but a dollar, people would fast enough be found to protest that it was unreasonable to charge the same from Wall Street to Central Park as from Boston to San Francisco. A business such as this can be managed well enough by a civil service organization. It is

*"Railroads: Their Origin and Problems." Edition of 1888. Page 115.

essentially a matter of routine and operating efficiency. There may be, in fact there usually is, political interference in reference to appointments and promotions. And the staff no doubt avail themselves of their votes to improve their wages and working conditions. But this, though a pretty serious matter, is not so vitally important as the difficulties on the side of commercial management.

Whether a new railroad shall be built is not a matter where precedents and fixed rules can decide. It can only be decided by a man able to bring to bear on the question a trained mined and ripe judgment, after taking into account all the factors of probable traffic, probable cost, and whether the limited amount of capital available would not be better employed elsewhere, perhaps in something like double tracking, or the construction of a new classification yard, which does not appear directly to benefit any single member of the public. It is hard enough for the best man, left free to exercise his unbiased judgment, to decide such questions rightly. Can it be expected that they will be decided rightly by a Minister responsible to a democratic legislature, each member of which, naturally and rightly, makes the best case he can for his own constituents, while he is quite ignorant, even if not careless, of the interests, not only of his neighbor's constituency, but of the public at large? The answer is written large in railway history.

Politics in South African Railways

It may be said without fear of contradiction that in no democratic community, where the railways are run by the public authorities, is railway capital spent on construction, developments and improvements, or railway operation conducted, with a single eye to the best interests of the whole community. To produce public evidence of this statement is not easy. It is not fair to quote unsupported assertions in newspapers or elsewhere, as though they were proof. The men who know the facts from the inside are not in a position to publish them. But of recent years, South Africa has spoken out with considerable freedom on the subject in official documents. And South Africa may well serve as a sample. In March, 1907, a Commission on the Cape Railways reported unanimously that it "was impressed with the necessity of removing as far as possible the management of the railways from the influence of party politics." Here is in more detail an account of the reasons which led them to that conclusion. The quotation is from: "A Memorandum relative to Railway Organization, prepared at the request of the Railway Commissioners of the Cape Government Railways, by Sir Thomas R. Price, formerly general manager of

those railways, and now general manager of the Central South African (i. e., Transvaal and Orange River) Railways, dated Johannesburg, February 22nd, 1907."

"Political Influences—Disturbing Effect of.

"The drawbacks in the management of the railways in the Cape that call for removal arise from the extent to which, and the manner in which, the authority of Parliament is exercised. They are twofold in their character, viz.:

"(1) The practice of public authorities, influential persons, and others bent on securing concessions or other advantages which the general manager has either refused in the conscientious exercise of his functions, or is not likely to grant, making representation to the Commissioner (as the ministerial head of the Government), supplemented by such pressure, political influence, or other means as are considered perfectly legitimate in their way, and are best calculated to attain the end applicants have in view.

"(Many members of Parliament act similarly in the interests of the districts, constituents, or railway employees in whom they happen to be interested. It is by no means unknown for the requests in both classes of cases to coincide somewhat with a critical division in Parliament—present or in prospect—or otherwise something has occurred which is regarded as irritating to the public or embarrassing to the Government, and the desire to minimize the effect by some conciliatory act is not unnatural).

"(2) The extent to which the fictitious, and often transitory importance which a community or district manages to acquire obscures (under the guise of the Colony's welfare) the consideration of the railway and general interests of the Colony as a whole."

"(During the earlier period of my railway service in the Cape Colony few things impressed me more, coming as I did from a railway conducted on strictly business lines, than the extent to which the conduct of railway affairs was influenced by certain conditions. Nor was this impression lessened afterwards, when in the course of a conversation on the matter, Sir Charles Elliott mentioned to me that he had more than once told a late Railway Commissioner 'The Government is powerful, but [mentioning the town and authority] is more powerful still')."

"I do not regard it as open to doubt that the Colony as a whole has suffered severely in consequence, the inland portions of the Colony particularly so; and that the need for a remedy is pressing if the railroads are to be conducted as a business concern for the benefit of the Colony.

"Means of Securing Freedom from Political Influences."

"The necessity for the railways and their administration being removed from such an atmosphere, and treated as a most valuable means of benefiting the Colony as a whole, whilst not neglecting the interests of a district (but not subordinating the welfare of the whole Colony thereto), is pressing. That there should be an authority to refer to in case of real necessity, where the decision or action of the general manager is not regarded as being in the public interest, is also clear. But it is equally manifest that the Commissioner or the Government of the day, with political or party consideration always in view, is not the proper court of reference.

"Political Influences as affecting Construction of New Lines.

"There can be little doubt that in the Cape Colony political considerations have influenced the adoption of new lines and their construction—many, if not most of them, of an unprofitable character—without sufficient inquiry or information, often with scanty particulars, and possibly contrary to the advice of the officer afterwards entrusted with the construction and working of the line.

"Proposals for New Lines—Procedure recommended.

"A material change is imperatively necessary in this respect, if only to insure solvency of the Colony."

Neither the Commision's Report nor Sir Thomas Price's Memorandum can have sufficed to change matters, for in May, 1915, there was a further "Memorandum on the Control and Management of Railways and Harbors" presented to the South African Parliament by the Board of Railway Commissioners. Here are some extracts from it: "Any Minister, however able and strong his character may be, is, under the system of party government, insensibly susceptible to party considerations and is in constant difficulties in giving impartial decisions. * * * It is perhaps natural that men who have been accustomed to the methods in vogue when the railways were of limited extent should still desire to cling to the old system of control, but the consequences of doing so cannot but be unsatisfactory. * * * As the railways and their working were regarded as part and parcel of the system of party government, with the obvious advantage to the party in power, the reluctance of any Government to make a change is what might naturally be expected. Apart from the magnitude of the railways and the number of the railway servants employed, forces have of late years come into prominence that make it increasingly urgent that the railways and harbors should be regarded and administered in the interests of the whole Union and not as an adjunct of the party that is in power."

Official documents have not let us behind the scenes in Australasia, in the same way as has been the case in South Africa. But the public history is sufficiently striking. Down to the year 1884, the railways in all the different colonies were managed, like any other department of the Government, by a Minister directly responsible to Parliament. This system was not a success, either from the financial or any other point of view. In 1884, Victoria led the way to the adoption of a new system. A buffer was inserted between the politicians and the railways in the shape of a non-political commission. The Commission was composed of three men holding office for a fixed term of five years, and, like judges, irremovable except on a vote of both houses of Parliament. The members were all professional railway men, and the Chief Commissioner had the right, in case of disagreement, to over-rule his colleagues. A well-known English railway man was appointed to fill the post of Chief Commissioner. The Commission had not power to undertake the construction of new lines without the consent of the Ministry, but the entire responsibility for the maintenance and working of the existing lines was handed over to them.

The example of Victoria was followed by South Australia in 1887, by New South Wales in 1888, and by Queensland and New Zealand shortly after. In each case, the first Chief Commissioner was an English railway man. In Victoria, the new system was not over-successful. Political pressure still continued. The financial position got worse. Budget estimates of expenditure were largely exceeded. And, as has already been mentioned, free transportation was given on a wholesale scale to the dependents of members of Parliament. After much mutual recrimination, the Commission was abolished, and the railways handed back to direct political control. Evidently a Commission which, though composed of individuals personally clean-handed, is not strong enough to crush attempts at jobbery in its neighborhood, may be even worse for the public interest than a Minister who uses his patronage for political ends. For the Minister can at least be watched and exposed in Parliament by political opponents, while a Commission can take shelter under the cloak of its statutory irresponsibility.

The experience of New South Wales was different. The Chief Commissioner appointed in 1888 was not merely a brilliantly able administrator, but a man of iron will. He insisted on managing the railroads committed to his care solely in the public interest. And within four years, he had succeeded in simultaneously advancing wages, reducing rates, and increasing net earnings by 56 per cent.;

thus restoring the finances to a satisfactory position. The result was curious. The Commission was persecuted by a "large number of people whose influence was at an end under a changed state of affairs." Two Commissions of Inquiry were appointed to investigate the alleged misdeeds of the Commissioners. They found an unhesitating verdict for the defendants on every count of the long indictment. An address of confidence was signed by thousands of electors all over the colony and presented to the Commissioners at an enthusiastic meeting of five thousand citizens of Sydney. The Commissioners were reappointed for a second term of five years; but early in his second term the Chief Commissioner died suddenly. Within a few years things had gone so far wrong that a Royal Commission was appointed to investigate. As a result of their report two out of the three Commissioners were called upon to retire.

It is not possible here to go through the varying histories of all the colonies. One important phase of the history must not, however, be passed over. In Victoria, in 1903, there was a fierce railway strike, which, by the threat of a drastic Bill introduced in Parliament with the support of an almost unanimous public opinion, was promptly put down. Thereupon an Act was passed depriving all railway servants of their local vote, placing them on a separate and distinct register, and giving them power to elect as their special representatives one member to the Council and two to the Assembly. In 1906 this Act was repealed and superseded by "An Act to abolish separate representation in Parliament of Public Officers and Railway Officers." Section IV, (1) and (2) of this Act, which is still in force, is as follows:

(1). "In order that all officers may be enabled to render loyal and efficient service to the State, it is hereby enacted that no person or class of persons employed in any capacity (whether permanently or temporarily) in the Public Service (including the Railway Service, the Police Force, the State Rivers and Water Supply Department and the Lunacy Department) shall either directly or indirectly take any part whatsoever in or in relation to election of members to the Legislative Council or the Legislative Assembly, or directly or indirectly in any way take part in the political affairs of the State of Victoria, otherwise than by recording a vote at a Parliamentary election; and no person or class of persons so employed shall directly or indirectly use or attempt to use any influence in respect to any matter affecting the remuneration or position in the Public Service of either himself or any other person.

(2). If any person so employed is guilty of any contravention of this section, then on proof thereof to the satisfaction of the Public Service Commissioner, the Commissioners of Railways, the Chief

Commissioner of Police, or the State Commissioners and Water Supply Commissioners, or the Inspector General of the Insane (as the case may be) such person may by the said authority be fined any sum not exceeding £10 and may be reduced in class, subdivision, grade or status, and salary, or he may be dismissed or his services may be dispensed with, provided that such person shall not be dismissed or have his services dispensed with for any contravention of this Section without the consent of the Governor in Council."

Victoria had in 1903 again reverted to the Commissioner system. It imported an expert—this time from America—and a striking improvement, both in operating and financial results, at once became evident. Since then there has been a relapse, and it is understood that at present Victoria is once more considering the importation of a new expert. In fact, in almost every colony, the management has gone through various phases. Sometimes there have been Commissions of three, at other times single Commissioners. At one time a Commission has had full power; at another time it has been more or less subordinated to a Minister. Or, again, the Commission has been abolished altogether, and the railways have been worked by a general manager whose position is definitely that of a Ministerial subordinate.

Another point may be noted. For thirty years most of the Australian States have imported their chief official, whether entitled Commissioner or General Manager, from England. They have not had the pick of the English railway service. For neither in authority nor in compensation is the position in Australia comparable to that of a General Manager of one of the great English railways. And yet the practice continued. What shall be said of an organization which cannot train its own young men to become chief executives? That the men are there, there can be no doubt. No one would suggest that the average Australian is inferior to the average Englishman. Is not the reason that, in a commercial concern, promotion by merit not only brings the best men to the top, but stimulates every man to do his best, while Government service usually only gets work done at the rate of what is known in England as the "Government stroke."

Politics in Belgium

The history of Belgium affords a singular contrast to that of Australia. There has been no attempt to interpose a buffer authority between Parliament and the railways. The political Minister is frankly the head of the railway system. And what is more remarkable the same political party—called Catholics by themselves and Clericals by their opponents—have been in power for 32 consecutive

years, and up to the time of the war, they showed no signs of losing their hold on the management of affairs. It is claimed by the Liberal and Labor opponents of the present Ministry that this long tenure of office is in large measure due to the patronage and influence which their possession of the railways gives them. Certain it is that about six per cent. of the total votes polled—in Belgium, voting is compulsory—are those of the railway staff. Certain it is, too, that the State administration does not err on the side of employing too small a staff. Per kilometer of line open it employs 19.1 persons, while the Northern Railway Company of France on its lines in Belgium, where the traffic is certainly not below the average of the State system, only finds it necessary to employ 12.91. It is certain also, that, while the goods rates, which are only directly paid by a few persons, have been maintained unreduced—it is fair to remember that even now they are the lowest in Western Europe —passenger fares, which appeal to the general public, have been brought down to a point which experts say results in an actual loss. The long distance workmen's weekly tickets have often been referred to with admiration. In the case of the longest distance, the rate charged comes down to as low as six miles for one cent. Professor Mahaim* regards these workmen's tickets as "a boon which has rendered the population mobile, and solves the problem of unempoyment." The opponents of the Ministry tell another story, and assert that these tickets are issued in order to prevent workmen leaving the country districts, where they remain under the influence of their priests, and coming to live near their work in the towns, where they might be subject to other political influences. They assert that it is not in the interests of the workmen that they should be encouraged to live so far from their work that in extreme cases they have to leave home at 3.30 or 4 o'clock in the morning, and only get back at 11 o'clock at night. And this view has very recently received support from one who cannot be regarded as a political opponent. Writing in the "Independence Belge" for 20th September, 1916, Father Rutten, a very well-known and influential priest, and a strong supporter of the Government, says: "Better and cheaper connection with the suburbs will alone induce workmen to desert the crowded centres; but matters must not be pushed to the other extreme of further multiplying the workmen's fares. I have seen at too close quarters the demoralizing of the Flemish worker who has to spend every day four or five or even six hours on the railway, in crowded carriages, in an atmosphere that in winter is not fit to breathe. Living in the country is all very well; but the benefits are

*"Railways and the State," London, 1912.

greatly reduced by the necessity of these long journeys and by the hours spent in the saloons alongside the stations."

It may be added, that whatever the reason be, the Ministry have been so strongly opposed to bringing workmen to reside in the big towns that, not only have they done little or nothing to develop suburban traffic in the immediate neighborhood of Brussels, but they have steadily refused the request of the railway officials that workmen's cottages might be built near the big stations, so that men might be at hand at all times of the day and night for urgent requirements of snow storms, accidents and the like.

In the matter of train service, it will hardly be denied that the Belgian State railways are inferior to all their neighbors; every passenger entering Belgium from France is conscious of a marked slowing down of the train. Indeed, the international service between Ostend and the German frontier was so poor that the Prussian Government is understood to have threatened to divert the English Mail via Holland and Flushing unless it was improved.

Antwerp and Brussels, the two principal towns in the country, with a population of over a million between them, are only 27½ miles apart; until quite recently the best train took practically an hour over the journey. The slowness of the trains is partly to be explained by the fact that expenses have been rising fast in recent years, and the State Administration has economized in road maintenance. And M. Mahaim gives figures, of which he apparently does not fully appreciate the significance showing that, while between 1901 and 1908 total operating expenses rose 25 per cent., road maintenance expenditure only rose 1.7 per cent. And every railway man knows what this means. Nor can it be denied that the Belgian Government has been behind the times in necessary new capital outlay. To give one striking instance: A direct underground connection between the Northern and Southern stations at Brussels has been recognized as necessary for a quarter of a century. The work was only commenced just before the war, up to which time the only access to the Northern Station was over a single track known to the Brussels newspapers, owing to the frequency of accidents on it, as "the death trap."

In Belgium the Railway Budget and the State Budget are inextricably entangled. Promises have been frequently made that the two budgets should be separated, as in Switzerland and Italy, but hitherto the promises have not been carried out. Official figures do indeed give the total amount of the railway debt. But there are no separate railway loans; the whole money has in fact been raised on the general credit of the State. The Railway Accounts show a figure of some $3,859,040 per annum charged as "sinking fund."

But in fact no sinking fund payment is really made, and the figure is a mere book entry.

When the Chicago and Alton railway under Mr. Harriman's management went back into the old books, extracted items of what were really Capital Expenditures but which had been paid out of Revenue, and then proceeded to capitalize the result, Americans denounced it as a financial scandal. But the example had been set by the State Administration of Belgium some years before. In 1897, the Ministry went back on the sixty-three previous budgets, extracted a host of small additions to works and equipment which had been charged to Revenue under the category of Renewals, making together a total of over $2,122,472, and charged them back against Capital.*

Efforts have been made from time to time, not only to separate the Railway Budget from the General Budget, but to withdraw the actual management of the railways from the political Minister. In 1905, for example, when M. Liebeart was Minister of Public Works, the general management was, in the interests of discipline, handed over to an expert railway man. The reform immediately produced excellent results. But the deputies complained that their recommendations had ceased to be received with sufficient attention, and one of the first acts of M. Helleputte, who succeeded M. Liebeart as Minister in 1907, was to resume all authority into his own hands. How that authority is exercised can be judged by one or two instances. According to the regulations, for every place vacant that is not open to competition, a candidate must be entered on one of five categories. The first three categories are composed of sons of officials possessing various qualifications. The fourth category is composed of persons recommended to the Minister's private secretary by senators, deputies, or priests. The fifth category comprises everybody else. The categories are taken in order. In practice the first three categories provide very few candidates, and broadly no one is ever appointed except from the fourth category, "recommended candidates." The railway officials have tried to mend matters by filling as many posts as possible by competition. The Ministry fights against this enroachment on its influence. For instance, open competition for the posts of road-foreman and running-shed-foreman has been put a stop to. Promotion is nominally by seniority, except in cases of exceptional merit. In practice there is good reason to believe that the exceptional merit is mainly of a political kind. The superior officers are forbidden to mix themselves with politics, which, in practice, means that they are forbidden publicly to express opinions

*See the official "Compte Rendu" for 1912, p. A89.

other than those of the Government. Similarly the formation of associations among the rank and file of the staff is closely supervised.* It is claimed that, while Catholic workmen are free to associate as they please, associations of an opposite tendency live under a constant threat of dissolution.

Here is a quite recent story. On the occasion of the elections in June, 1912, as the result of orders direct from the Cabinet of the Minister himself, increases of wages were granted and paid to a large number of men on the very day before the vote was taken, and these increases were made to date back to the previous 1st January, The Minister was accused in Parliament of having ordered these increases by telegraph; he replied that the accusation was not true. He was quite accurate in his statement. The order had been given by telephone.

As is well known, the Catholic party is mainly composed of the Flemish portion of the population, while the Liberals and Socialists are mainly French and Walloon. Two somewhat amusing instances of the encouragement of Flemish aspirations may be given. The public notices in the stations at Brussels used to be in two languages —the French above the Flemish. Not long ago, they were all taken down, and stuck up again with the Flemish above the French. The Traveller's Guide used to be published in two editions. Of the French edition 80,000 copies were sold; of the Flemish 3,000. And it is alleged that, in order to get even the 3,000 sold, the French edition was allowed to go out of print before the demand was exhausted. To please the "Flamingants," the French edition has been abolished, and a single edition has been put out in both languages, naturally larger, more complicated and less convenient.

Let us turn from the question of interference with the management of an undertaking belonging to the public at large in the interests of a single political party, and note a result of State management of a quite different kind. Alongside of the Belgian State railway system proper, there is a secondary system of light railways, under a management organized as a company, of which, however, the State and the various local authorities are practically the only shareholders. In this secondary system the State has only about fifty per cent. interest, whereas it has a hundred per cent. interest in the State railways proper. The Minister of Public Works has control of the tariffs of the light railways, and exercises that control to prevent the light railways from reducing their tariffs—though it may be to the interest both of the light railways and their customers

*See the regulations put out in March, 1910, which are to be found in the report of M. de Bue on the Railway Budget of 1911 in the "Documents Parlementaires."

to do so—whenever it is feared that competition injuriously affecting the State railway revenues might result.

One word more as to Belgium. The same political party has, as has been said, retained control of the railways in Belgium for 32 years. But shortly before the war a Commission was appointed to inquire into the whole subject. No report has been officially published. But it is a matter of public knowledge that the Commission had determined to recommend that the construction of new lines should in future be entrusted to a contractor and not left in the hands of the Railway Administration, that they were seriously considering the grant of a lease of the State railways to an operating company, and that certain very influential persons were in favor of the adoption of this policy.

Conclusion

President Hadley has summed up the conclusions of the Italian Railway Commission based on the railway experience of the world, as it existed 35 years ago, as follows:

(1) Most of the pleas for State Management are based upon the idea that the State would perform many services much cheaper than they are performed by private companies. This is a mistake. The tendency is decidedly the other way. * * * The State is much more likely to attempt to tax industry than to foster it.

(2) State management is more costly than private management. * * *

(3) The political dangers would be very great. Politics would corrupt the railroad management, and the railroad management would corrupt politics. * * *

In the foregoing pages, an attempt—hampered by the condition that the most important facts of contemporary history are not always those that can be most readily published—has been made, subject to strict limitations of space, to bring the history up to date. And the conclusions of the Italian Commission still seem to stand firm.

The essential lesson of the history may be said to be this: It is impossible to obtain satisfactory results on government railways in a democratic State unless the management is cut loose from direct political control. Neither Australia nor any other country with a democratic constitution—perhaps an exception ought to be made of Switzerland—has succeeded in maintaining a permanent severance. The Australian Parliaments have loosened their hold for a few years, but only for a few years. In France, in Belgium, in Italy, Parliamentary interference has never been abandoned for a moment.

Without imputing a double dose of original sin to politicians, it is easy to see why this happens. The railways belong to the people. Parliament is the authorized representative of the people. It seems therefore to the ordinary citizen only right and natural that Parliament should control the management of the people's railways. And yet facts are stubborn things; and the facts show that Parliamentary interference has meant running the railways, not for the benefit of the people at large, but to satisfy local and sectional or even personal interests. They show further that, under Parliamentary management, it is easier to get money for big schemes of new construction than for inconspicuous day-to-day betterments and improvements which probably would produce much greater public benefit. Some day perhaps, having learned wisdom by experience, a Parliament and a people may recognize that management for the people is not necessarily management by the people; that there are other branches of government, besides the judicial branch, unsuited for popular interference; and may establish a permanent State railway organization, with its own board of directors, with its own separate budget, and entirely independent of Parliamentary control, but controlled like any private company by a judicially minded commission, required also like a private company to earn a dividend for its stockholders, the people. And then a main objection to Government railways in a democratic State will have lost its force. But hitherto no Parliament and no people have recognized this fact, even though it stands out abundantly clear on the pages of railway history.

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